

# HOUSING BRITAIN

A CALL  
TO ACTION







“WE MUST CONSIGN  
THE MONOCULTURAL  
HOUSING ESTATE TO  
THE PAST AND NOW  
BUILD BEAUTIFUL,  
MIXED-USE, WALKABLE  
PLACES OF WHICH  
FUTURE GENERATIONS  
WILL BE PROUD”

– HRH THE PRINCE OF WALES



Housing has become one of the greatest challenges the United Kingdom faces. Our young people are increasingly less likely to own a home of their own and rental properties can sometimes be expensive and poorly maintained. It is vital that in tackling this vastly difficult and multifaceted issue we do so in a way that will ensure future generations have access to attractive, well planned and genuinely sustainable places to live for years to come.

I have long believed that for communities to prosper they require a built environment that provides good quality homes that are planned as walkable, mixed-use and mixed-income neighbourhoods, with integrated affordable housing that is as well designed as the rest. They also need a range of local services accessible by public transport, green routes and natural places that are enjoyable and safe for cycling and, above all, with a local identity that fosters pride and a sense of belonging, and has character and beauty. The most successful and popular neighbourhoods have most, if not all, of these qualities and unquestionably help in improving the quality of people's lives, social cohesion and well-being. Interestingly, a recent Royal Society research study has demonstrated that beautiful places and locations are associated with better health. The study revealed that "the uplift in joy from visiting a pretty neighbourhood was, on average, greater than that gained from cooking, eating and reading. Likewise, travelling from a place of beauty to an ugly one led to a slump in happiness similar to commuting."

Having spent 30 years championing the need for this sort of approach to place-making, I am encouraged that these principles seem to be gaining acceptance and are often being called for by communities and local authorities in their neighbourhood and local plans. However, while an increasing number of good examples are emerging across the country, the vast majority of new homes being built are

still homogenous housing estates, targetted at a relatively slim area of the housing market, and put on the outskirts of our towns and villages where they do little to enhance the place in which they are built.

In the three decades since my book, *A Vision of Britain: A Personal View on Architecture*, was published, the Duchy of Cornwall has been putting theory into practice on two major settlements that have been taking shape – Poundbury on the edge of Dorchester, and Nansledan on the outskirts of Newquay. Both have differing socio-economic demographics but, thanks to some committed and talented individuals, these developments, which are the result of a carefully structured community planning process that helps to add social, environmental and commercial value, are increasingly being visited and studied as a new model for development and place-making. Rather than focussing solely on architectural style, people are recognizing the economic benefits – at Poundbury, with the first 1,700 homes, there have been over 2,300 jobs in 185 businesses created already, many of which are start-ups, and nearly one hundred million pounds in goods and services is going back into the local economy each year. Although derided by many at the time, but not by the local people who took part in a comprehensive community planning exercise, I am heartened that both the Duchy's and my Foundation's work is now gaining approval and shifting the tide of opinion, proving that long-term stewardship delivers greater commercial, as well as social and environmental, benefit. Furthermore, there is evidence that mixed-used developments with a wide range of house types and tenures sell more consistently through all market conditions.

Developing this model to work on a range of public and private sector land is ever more important, and for this to

happen there needs to be a fundamental change in the way landowners are incentivized. Robust principles and standards need to be agreed before land is allocated and given consent. But, in recognition of the pressure to build more houses, this needs to be done quickly. It would also make a significant difference if a greater diversity of investors could be encouraged into the place-making sector – those with longer-term horizons and a genuine interest in how the community can add value over time.

In this special edition magazine, published by my Foundation, some of the pioneers who have been instrumental in the place-making journey I started 30 years ago have been interviewed and asked to reflect on the principles and solutions to Britain's housing challenge. The various sections are not designed to be exhaustive, but to give landowners, civic leaders, community groups and professionals a reference guide and common language by which to discuss how we should all rise to the challenge of the creation and regeneration of genuinely beautiful places that help to enhance our sense of well-being and which are designed in harmony with Nature.

Tackling this issue is daunting, but I do believe that solutions can be found if we work together around this common cause. We must demand better places that break the stranglehold of the conventional mould of monocultural housing estates and zoned developments that, up to now, have put the car at the centre of the design process and not the pedestrian and thereby created an increasingly unsustainable environment. To do this, we must find ways to incentivize the developers, landowners and professionals who want to build them. If we can make this a priority then this country can be proud of what we build now – our future heritage – and be certain that it will be cherished by generations to come.



HRH THE PRINCE OF WALES



# CONTENTS

## 8 TIME FOR CHANGE

The UK's housing market is broken, we explore the reasons behind the crisis and propose possible solutions

## 14 WHY WE MAKE PLACES

Could shared public spaces, such as those found at Poundbury and Brindleyplace, be the key to cohesive and happy communities?

## 18 MADE FOR WALKING

Why transport engineering is crucial to ensuring new developments prioritise pedestrians and cyclists over cars

## 20 ON YOUR DOORSTEP

Meet the small business owners of Poundbury who are providing essential services for their local community

## 24 BUILDING BEAUTY

Architects Ben Derbyshire and George Saumarez Smith discuss why beauty is crucial when it comes to building new homes

## 28 LANDOWNER LEGACY

The forward-thinking landowners who are choosing to develop their own land as stewards, putting prospective residents first

## 34 SMALL BUILDERS MATTER

A look at the important role of small and medium-sized housebuilders in developing desirable and well-built communities

## 38 SPEAKING VOLUMES

We explore the struggles facing volume housebuilders and the efforts they are making to produce better quality housing

## 40 THE REGENERATION GAME

The Prince's Foundation's work on heritage-led regeneration projects, including Middleport Pottery and Bentley Priory

## 44 NEW HEIGHTS

With high-rise buildings on the increase, we ask if they are the best solution to housing the growing number of people in our cities

## 48 GREAT ESTATES

Could the regeneration of inner city estates be the answer to providing more homes throughout Britain?

## 50 INDUSTRIAL EVOLUTION

How the creation of a new town and university campus on a former brownfield site has revitalised a corner of South Wales

## 52 THE FAST TRACK

Can beautiful homes be made in a factory? We explore the wide-ranging benefits of mass-produced modular homes

## 54 LIVING WITH NATURE

How ecologically sound developments such as Nansledan in Cornwall are pioneering new methods to enhance our wildlife

## 58 CALL TO ACTION

A fourteen-point summary of the best ways in which we can revolutionise housing in Britain

## 62 FURTHER READING

A round-up of essential reading and resources, including books and reports as featured throughout the magazine





AVERAGE NUMBER OF HOUSES BUILT  
ANNUALLY IN THE UK PER DECADE



THERE IS A NEED FOR NEW HOUSING  
IN THE UK. IT'S TIME FOR FRESH  
SOLUTIONS AT EVERY LEVEL, FROM  
TACKLING THE UNDER SUPPLY OF  
LAND TO THE CREATION OF MIXED,  
COHESIVE AND DESIRABLE COMMUNITIES

## TIME FOR CHANGE

At present, the United Kingdom is barely able to house itself. Supply is not keeping up with demand and housing is becoming increasingly expensive, both in the sales and lettings markets. As you can see from the infographics around this article, the numbers speak for themselves. However, there is one statistic that should be ringing in our ears – the government has stated that we need to build an extra 300,000 new homes a year in England alone. Yet over the past decade construction has been around half of that, and there's been precious little in the affordable bracket. Home ownership has dropped while those reliant upon private rented accommodation has soared, which often leads to reduced living standards. "It might be okay to move all the time when you're young, but for families with kids in school it has a negative effect, and if you're elderly, it becomes a serious danger to your health," says Greg Beales, Director of Communications, Policy and Campaigns at Shelter. "Rents are going up, wages have stagnated and housing benefits have been frozen."

Beales cites the UK's insufficient social housing as one of the root causes of the problem. "After World War Two there was a period of 30 years when we were building in excess of 100,000 social homes a year. Last year we built 6,000 social homes and we currently have

1.2 million people on the waiting list," he says. The policy of Right to Buy, introduced in 1980, which gave local authority tenants the legal right to buy their home at a sizeable discount, significantly depleted social housing stocks and successive governments have not replaced them at the same rates. "In generations past, a young couple would have been able to buy a home but now, because of the lack of social housing and the cost of private renting, they cannot save and therefore have no route into ownership," says Beales.

The UK's undersupply of housing across the board is a concern that boils down to the undersupply and cost of land. The 1961 Land Compensation Act changed the rules in such a way that allowed landowners to expect the hope price of their land (as if it had planning permission), rather than its actual value. This, paired with the general trend for falling inflation and low interest rates has resulted in the asset price inflation of land value with prices having doubled in the last five years alone. In an open market, landowners can sell to the highest bidder, which has tended to be volume housebuilders. And having invested so much in this raw material, the incentive is to turn a profit by constructing as many homes on the land as possible, and reducing infrastructure provision

Source: Office for National Statistics, 2018



while asking a premium price for houses that only serve a small part of society. This form of speculative development can also cause “land banking” (where developers buy undeveloped land as an investment with no fixed plans for its development), and houses being built out slowly, leading to even higher prices.

“What results from the undersupply of land is a response from the housebuilders to compete for land at the expense of quality of placemaking, and what we’re seeing is increasingly bland estates full of poor-quality homes with fewer facilities,” says Lord Matthew Taylor, planning policy advisor and former MP. “They just don’t create successful places, which leads to NIMBY (Not In My Back Yard) culture whereby people are opposed to developments like these being built and councils are resistant to letting land come forward, which makes the situation even worse.”

Historically, this vicious cycle has hindered the provision of affordable housing as developers have been able to use viability reports in the planning permission stage to argue that the price they paid for the land means they cannot afford to meet the targets for affordable housing set by local authorities. However, in 2018, changes to the National Planning Policy Framework helped to close this loophole. Guidance now makes it clear that the price paid for the land is not an acceptable reason to trigger a viability assessment change, and assessments must be done at the beginning of the process so that goalposts can’t be moved further down the line, although there are still concerns around permitted development rights.

Taylor believes that it’s changes at policy level that will deliver new and sustainable communities that work. His 2015 Policy Exchange report, *Garden Villages*, has since been adopted by the government as the *Garden Communities Programme* and more than 20 places are in the early stages of delivery. The

programme empowers local authorities to build new settlements on farmland outside existing historic towns. The towns must be masterplanned and delivered using strong design codes with provision for shops, schools, services, transport and green spaces. And by working with a mix of small and medium-sized builders, commercial developers and housing associations, build-outs will not only cater to everyone but be delivered much quicker, thereby making supply more responsive.

“The critical element is to deliver a sustainable community that people want to live in and that functions in economic, environmental and social terms. This can be garden villages or towns but the same principles apply to urban extensions and urban renewal,” says Taylor. “The market will deliver if players are competing on quality and price rather than having a monopoly. The most attractive places have the most demand and therefore the higher values. So if the government says you need a masterplanner – such as a local authority setting up a new town corporation, a long-term landowner who believes in legacy, or a commercial business committed to placemaking – then those stakeholders will want to make sure every house, road, shop, pub and park counts.”

This approach fits very much with the vision of The Prince’s Foundation, which is dedicated to creating harmonious communities that are fit for the future. It has put its vision into practice in its landmark urban extension developments such as Nansledan in Newquay. Built on Duchy of Cornwall land, the landowner plays the long game by investing in a properly masterplanned urban framework. This includes codes and pattern books specifying high-quality, local materials be used to create walkable and cycle-friendly neighbourhoods, a diverse set of housing types and tenures, mixed-use employment spaces and a range of public areas and local amenities.

## UK HOME OWNERSHIP FOR THOSE AGED 25–34

1996 55%  
2008 46%  
2016 34%

Source: Office for National Statistics, 2018



UK AVERAGE HOUSE PRICE AS A RATIO OF AVERAGE  
YEARLY SALARY FOR A SINGLE PERSON

1957  
2.94x  
SALARY

1997  
2.88x  
SALARY

2017  
7.40x  
SALARY

Photography by India Hobson Prop styling by Jo Bailey Source: Nationwide long-term house price dataset, using salary figures from Office for National Statistics, 2018

In developments such as these, it's been crucial to involve the local community in the design process in order to agree on what is popular design, and to work with a variety of small and medium-sized developers who build under license mechanisms and design controls. Higher building costs in the short-term are recouped when the community becomes desirable, this is made possible because landowners maintain a long-term management and investment in the site. Also key is for the provision of affordable housing to be seamlessly placed among other types of housing, and for it to remain affordable in perpetuity.

"People love to tell you about their place and if you listen and respond to their practical suggestions, such as which types of housing they like, then when they see it getting built it is immediately popular," says Ben Bolgar, Senior Director at The Prince's Foundation. "This is not to say you slavishly copy what they tell you, but you pick the best bits and try and make it better. In Nansledan, where we produced one of our first pattern books, everyone who visits or sees pictures of the development immediately knows it's Cornish."

"What we have learned, however, on other sites is that having a good landowner and developer counts for very little in the planning process before a site gets allocated, which is where the initial uplift in land value occurs," Bolgar continues. "If there is a way to level the playing field by tightening up on simple quality standards before land gets put into the local plan, then this would potentially help better builders and landowners get an advantage and a quicker path to a planning permission."

Land value capture is of course key. Central and local government have, over the years, imposed various taxes and charges on landowners once the value of their land has risen after granting them planning permission – the revenue raised by these levies then benefits the local community. Taylor argues that such measures can

be counterproductive because they undermine the landowner's willingness to put land forward, and also any costs are ultimately built into the system. Instead, by encouraging them with the benefits of good placemaking, more land becomes available and the cost drops, which captures its value from the outset.

Yolande Barnes is Professor and Chair of UCL's Bartlett Real Estate Institute; a new venture dedicated to bringing industry, academia and communities together to rethink the view of real estate beyond its financial value. "New models are needed because of the current rate of change in demand, in supply, in finance, in technology, in society and in demographics. In order to understand how all the pieces fit, and provide holistic solutions, all the players must come together," says Barnes. "The solutions we've seen work on the ground, including what The Prince's Foundation is doing, involve collaborations between many different skill sets, specialists and business types."

Barnes says it's about breaking down professional silos in every sector and building joint ventures across the public and private sectors to ensure a focus on quality and design. Barnes also advocates embracing the idea of mixed-use across residential, industrial and public buildings to future-proof obsolescence, such as small tertiary business units in town centres, and student accommodation blocks in cities that also act as hotels, restaurants and co-working spaces. She also applauds Poundbury as an exemplar of sustainable urbanism and where its landowner stewardship and land promotion models have delivered common goals. "We need to favour more robust streetscapes and adaptable, energy-efficient buildings. And we need to focus on mixed-use, flexibly managed urban communities. That's the evolution of real estate in the 21st century," says Barnes. "There's no silver bullet, but in many ways the time has come for The Prince's Foundation's ideas."



SHARED PUBLIC SPACES ARE ESSENTIAL TO ENSURING COHESIVE AND HARMONIOUS COMMUNITIES. WE LOOK TO POUNDBURY AND BRINDLEY PLACE AS TWO PRIME EXAMPLES

# WHY WE MAKE PLACES



Forums, piazzas, town squares: these shared spaces have stood at the heart of European settlements since antiquity. This public realm – the part of cities that is used collectively by its denizens – is responsible for many of the most arresting and animated experiences of urban life. It can prove the binding glue that turns a conurbation into a community. For the architect, theorist and urban planner Léon Krier, such areas proved fundamental to the evolution of Western society. “Public space is congenial with democracy and there is no democracy without a non-sectarian, open and beautiful public realm,” says Krier. “It is what allows individuals of rivalling families, classes, professions, corporations, races, incomes and ages to become citizens of a lay-community, of a town and a society.”

This model of the city, however, found short shrift for much of the 20th century. Modernist theories of urban planning tended to separate out the city into a series of zoned functions, rather than conceiving it holistically. In 1933, the architect Le Corbusier published the *Athens Charter*, which advocated the building of machine-like Functional Cities. Areas of development would be solely created for a single purpose. Design would be dictated by the ease of access of cars, by which means people could move between residential, commercial and industrial areas. The traditional model of the street was replaced by the vehicular road. “La rue est mort,” declared Le Corbusier.

Post-war, these ideas became internationally pervasive. The separation of functions through zoning became a leitmotif. Even when the fixation with motor vehicles was critiqued, it often took this separation as a given (see *Made For Walking*, page 18). Modernism did not deny the importance of open space, of course, and indeed many modernist projects were couched in greenery, but it paid little heed to how such spaces could be used. “Modernist urban design had no interest in the public realm,” says architect Demetri Porphyrios. “Its policy of

“WE KNEW FROM TRAVELLING TO OTHER TOWNS AND CITIES THAT OUR FAVOURITE BITS ALWAYS HAD GREAT ROUTES AND PUBLIC SPACES”

– ROGER MADELIN, DEVELOPER



# “THANKS TO THE PRINCE OF WALES’ TIRELESS CHAMPIONING, POUNDBURY IS THE MODEL FOR MIXED-USE NEW TOWN DEVELOPMENT”

— LÉON KRIER, CHIEF MASTERPLANNER FOR POUNDBURY

clinically segregating uses and its derision of human scale contributed to the destruction of public spaces in our cities.” For the half-century after the *Athens Charter*, Le Corbusier’s ideas remained orthodoxy, despite failures undermining their claims to futurity.

In the late 1980s, though, things began to change. One project at the vanguard was Brindleyplace in Birmingham. At that time, the city centre was in a parlous state. The Inner Ring Road, completed in 1970, had formed a “concrete collar” around the traditional core, isolating it and choking its growth into neighbouring districts. Only accessible to pedestrians via maudlin underpasses, the centre had become a difficult and unattractive place to visit, work and live in. Faced with this decline, in 1988 the city council convened the Highbury Initiative – an international symposium seeking ideas for the city’s regeneration. Brindleyplace, immediately to the centre’s west, was the initiative’s most ambitious fruit.

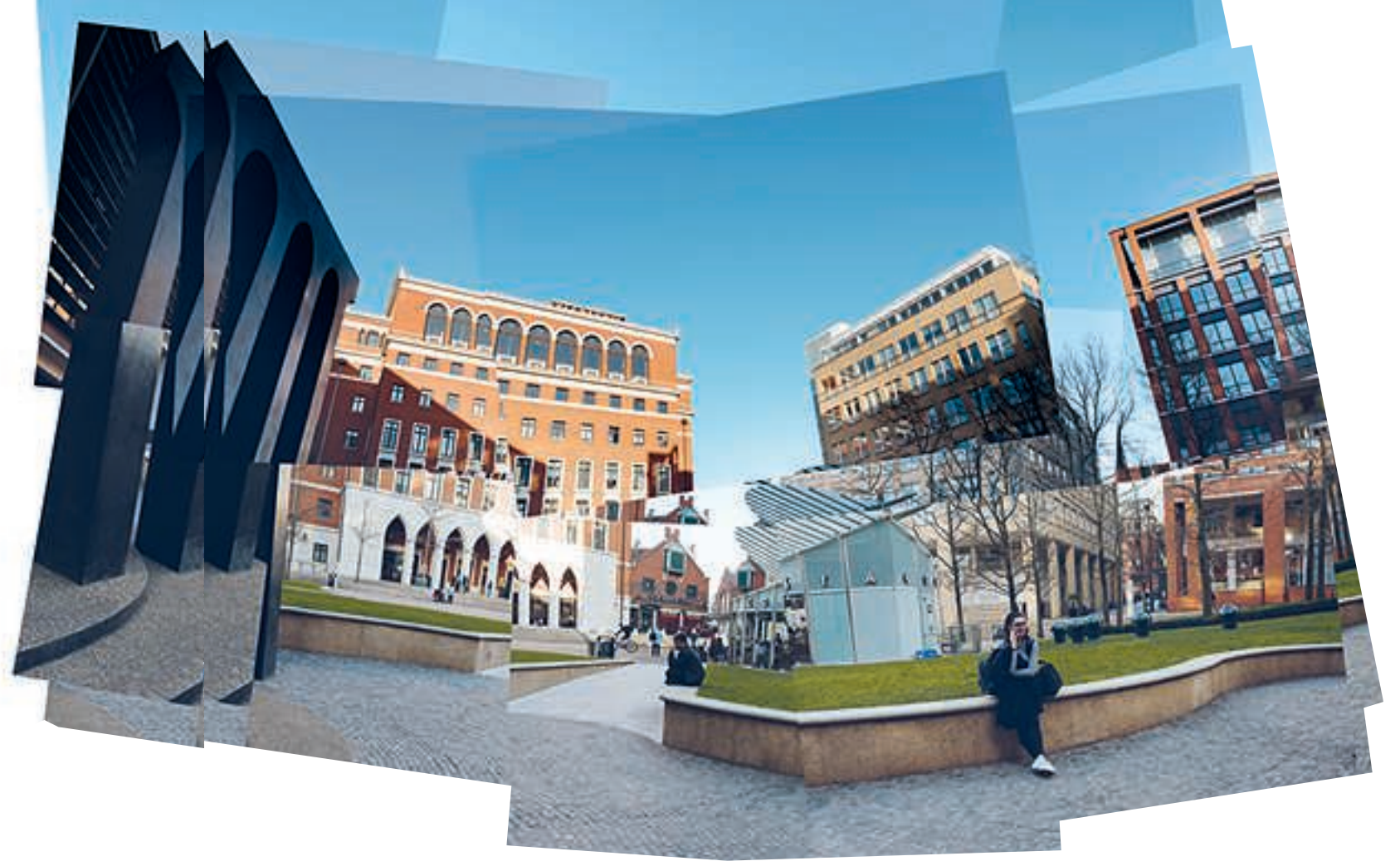
This mixed-use development brings together workspaces, housing, commercial units and cultural offerings, and was inaugurated in 1993 under the developers Argent. Several respected architects, including Terry Farrell, Allies and Morrison and Porphyrios Associates (who designed the central Three Brindleyplace office building), were involved from the outset. With the exception of a Victorian school, converted by Levitt Bernstein into the Ikon Gallery, Brindleyplace was entirely composed of new structures. The core idea was to design an open, attractive extension to the city centre, rather than a sequestered enclave. This holistic approach focused on the character, experience and interconnections of an area and has come to be known as placemaking.

“We had 17 acres of contained wasteland that no-one wanted to come to,” recounts developer Roger Madelin. “But it was connected back to the city centre with beautiful public realm. Why should we not respond to that as best as we could?” Porphyrios handed the developers a “short résumé” of successful

urban environments from the past 3,000 years, focusing on the traditional European city with its diverse range of buildings and bustling piazzas. “There was no sudden moment of realisation that having great routes and public spaces was the answer. It was just that we all knew from travelling to other towns and cities that our favourite bits always had them,” explains Madelin.

Core to Brindleyplace is a trio of public squares, faced by restaurants, bars and other amenities, as well as shared-use thoroughways giving equal priority to vehicles and pedestrians. A tree-lined central square was the first completed project: a gesture that foregrounded the centrality of the public space. “For the first time since the war it spoke of placemaking,” says Porphyrios. “It also spoke of architecture as a language that derives from both construction and human proportion.” For Porphyrios, the subsequent decades have seen these ideas filter through into Britain’s urban planning: “Terms such as framework, connectivity, human scale, the value of embedded heritage and placemaking are now part of the everyday language of the profession.” Recent projects such as Kings Cross Central in London (also masterplanned by Porphyrios with Argent) have continued where Brindleyplace started.

These values – particularly the creation of a human-focused “place” – also reverberate through what on the surface might seem a very different project. Conceived around the same time as Brindleyplace, Poundbury is an urban development on the western edge of Dorchester. While the former renewed a densely packed, post-industrial area in the core of the West Midlands metropolis, Poundbury occupies some 400 acres of previously undeveloped territory adjacent to a historical market town. Yet it embodies the same concerns with architectural diversity, pedestrian-centric planning and crafting a public realm. Poundbury began in 1988, when the local council deemed an area of land owned by the Duchy of Cornwall ripe for development. From the start, HRH The Prince of Wales took a prominent



Photography by Chloé Grayson and Jamie E. Murray

Above: Brindleyplace  
Central Square  
in Birmingham  
Previous page: Queen  
Mother Square in  
Poundbury, Dorchester

role, and encouraged the appointment of Léon Krier as chief masterplanner.

In his masterplan, Krier cemented his concern with the public realm. Poundbury is divided into four quarters, each of which centres around a main plaza, with the development as a whole pivoting around Queen Mother Square. Scale is limited so that all amenities are within easy walking distance. Major streets have wide pavements and green fringes, extending the public space, while away from central boulevards the street plans are irregular and shaped by their buildings, restricting the dominance of cars. Poundbury contains shops, pubs, restaurants, offices, factories, start-up businesses and a hotel, as well as housing. The plan echoes the traditional structure of cities, rather than that of the housing estate or dormitory suburb.

Executing a scheme as ambitious as Poundbury has had its challenges. “Persuading the Highways Authority to accept something new and radical was not easy, and it still isn’t,” says Andrew Hamilton, Development Director for the Duchy of Cornwall. “Co-ordinating the building of different developments

at the same site takes a lot of organisation, as does negotiating planning gain agreements with the local authorities,” he admits. Poundbury’s mixed-use, architecturally diverse spread is undeniably more expensive, and takes longer to build than the single-use, architecturally homogeneous suburbs that characterise much British planning. “But you get a higher return,” says Hamilton.

Although Krier has reservations about a handful of individual structures, he is happy by what has been achieved at Poundbury. “It has become a real and beautiful place, where people are proud to live and to work, to belong to and come from,” he says. Creating such a community; one that is providing an influence for communities to come, is no small achievement. “Thanks to The Prince of Wales’ tireless championing, Poundbury is *the* model for mixed-use new town development,” says Krier. Architects, planners and developers from across the world have visited Poundbury, and the ideas that formed it have begun to spread internationally. By looking into the urban plans of the past, Poundbury and Brindleyplace might provide the templates for the future.



TRANSPORT ENGINEERING  
IS CRUCIAL TO HOW NEW URBAN  
PLANNING CAN WELCOME  
PEDESTRIANS BEFORE CARS



Drawing of Poundbury by Léon Krier, 1992

**1**  
PAVEMENTS

There is no such thing as a pavement that is too wide, although traffic has to be considered. In residential streets, the minimum width should be 2m.

**2**  
CORNERS

Rather than giving traffic wide visibility splays, which encourage motorists to speed, tighter kerb radii and tighter junctions can be used to slow traffic down.

**3**  
VISIBILITY  
SPLAYS

Instead of speed humps, traffic speed will be kept low through the positioning of key buildings and by reducing the effective length of road sections to 70m.

**4**  
KERBS

Kerbs can protect pedestrians but they can also present barriers. Kerbs also tend to confer priority to vehicles. Without them the pedestrian is an equal.

**5**  
SIDE  
STREETS

Pedestrian routes should be direct. Permeable networks of small side streets and passages help to minimise walking distances.

M  
A  
D  
E  
F  
O  
R  
W  
A  
L  
K  
I  
N  
G

When architects and planners sit down to design a new place or settlement, or even a cluster of new houses, many of the key choices have already been made. Who by? By transport engineers. These professionals have already dictated the kind of main road off which developments will take place and thus made the first big step in determining the look and feel of the new part of a town before the rest of the design team have even got their pencils out. They’ve also decided what kinds of side streets will run off the main thoroughfare and thus pretty much what kind of housing might lie off them. This was the realisation that one of the country’s leading traffic planners, Andrew Cameron made when he started out.

“It always seemed to be the highway engineer who’d come in and say, ‘No, we’ve got to have this big road that’s 7.3 metres wide and it must be 40 miles an hour,’” says Cameron. “[The highway engineer] would say, ‘We should segregate pedestrians and put them in an underpass or send them over a bridge to make it safer’”. Questioning this situation, Cameron resolved to become a highway engineer and was later instrumental in overturning the entrenched traffic-first logic that had determined the planning of new housing since the 1960s. In 1963, Scottish town planner Professor Sir Colin Buchanan had written the well-intentioned document *Traffic in Towns*, which identified the increase in cars as a threat to historical towns. It recommended that new shopping precincts should be pedestrian-only, accessible by ramp or underpass and that new urban roads should encircle old areas. It also mandated town and city bypasses as a means of keeping traffic away from towns.

Buchanan, however, totally underestimated the demand for cars and indeed by actively planning for them and by designing roads for them primarily gave them ascendancy over the pedestrian. Xavier Brice, Chief Executive of the cycling advocacy body Sustrans says that the reason we are such a car-dominated society, is: “You get what you plan for. We’ve spent trillions of pounds over the last 70 years making it easy to get around by car... it’s embedded in all our tools and levers for planning.” Documents like the 1977 Department for Transport publication *Design Bulletin 32 (DB32)* carried this into the design of residential streets, stipulating wide visibility splays for street corners and long sight lines. It also promoted cul-de-sacs. It may have suited utility companies and drivers, but together these recommendations discouraged walking and cycling.

In 1994 Cameron started working for Alan Baxter, who was already providing the organisational

nous in the planning and the first phase of delivery of Poundbury: the pragmatic engineering partner to the masterplanner Léon Krier. At the time the received wisdom was being re-assessed not just in architectural terms but in terms of transport and specifically street design. Jan Gehl in Copenhagen was another figure keen to make roads suitable for pedestrians again. Baxter and Cameron set about radically overhauling ideas about road design that had become embedded in thinking in the UK with Poundbury as their testing ground.

Baxter describes their approach. “It was all about making streets that are good streets in which to walk and to make sure that cars don’t dominate. It was about getting cars to be what they should be: servants not masters,” he says. During its design, Cameron and other engineers had time to prove that cutting visibility splays decreased traffic speed and were able to convince utility companies and local authorities to try their new approach. Cameron subsequently co-authored a new document *Manual for Streets*, published in 2007, which supplanted DB32 as national guidance and disseminated lessons learned in Poundbury and elsewhere: shared surfaces that slowed traffic in Beaulieu Park, Chelmsford and home zones that enable street play in Northmoor, Manchester.

The thinking has thus influenced transport engineering in the UK, as well as further afield. Cameron, now with his own company Cameron and Associates, is designing settlements in Gabon and Kuwait. He is excited by a new raft of technology and schemes such as shared autonomous vehicles, which will mean families won’t require their own car sitting on a driveway unused. Baxter strikes a note of caution. “They could be a positive move,” he says. “But we might find the roads are jammed because everyone is jumping in their autonomous pods.”

It is a timely reminder. As the work done in changing the typology of the car-led age makes clear, urban form needs to outlast technology. The need for urban design to be determined by machines is a thing of the past and we can now focus much more on places for pedestrians. However, the battle is far from won. It defeats the point if within new developments where there are shared streets which encourage cycling and walking, inhabitants must then get in a car to drive to shops and public amenities in nearby towns. The financial imperative, which encourages new housing to be built on cheaper land at the edge of existing towns or even in ex-urban sites, often surrounded by farmland, tests this improvement to breaking point.



MEET THE BUSINESS PEOPLE OF  
POUNDBURY WHO MAKE THE  
MOST OF LIVING AND WORKING  
IN A MIXED-USE COMMUNITY

# ON YOUR DOORSTEP



“It takes me seven minutes to walk from my workshop to my home,” says Sue McCarthy-Moore, Poundbury resident of 23 years and proprietor of interior design business, Stitchinghouse Design. “Living here has given me a safe place to raise my kids and get my business going. It ticks all the boxes.” As one of the original occupants of this now well-established urban extension to Dorchester, McCarthy-Moore can attest to the success of one of its founding principles – mixing homes in with retail spaces, business properties and public amenities, thereby creating a community where people can live, work, shop and play.

McCarthy-Moore was initially offered affordable housing in Poundbury, where she could also rent



“LIVING HERE HAS  
GIVEN ME A SAFE  
PLACE TO GET MY  
BUSINESS GOING”

– SUE MCCARTHY-MOORE, STITCHINGHOUSE DESIGN



a workshop from landowners the Duchy of Cornwall. She’s since bought her own home as well as a retail unit. And while bespoke curtains and soft furnishings are Stitchinghouse Design’s specialty, McCarthy-Moore does receive the odd special request from locals, including creating a huntsman cape coat and brocade waistcoat for the town crier. “While I was making the coat he’d do a cry about me every Saturday morning. I had to duck into shops to get away from him!”

This thriving corner of Dorset brings to life HRH The Prince of Wales’ views on architecture and urban planning as outlined in his book, *A Vision of Britain*. He believes that by giving priority to people over cars, and by creating public spaces and bringing

together a range of residential, business and leisure facilities in an attractive setting, new communities will prosper. Construction on the site commenced in 1993, and the last of its four integrated quarters is due for completion in 2025.

Poundbury is currently home to around 3,000 people and employs 2,364 in the 187 shops, cafés, offices and factories with a further 550 working in construction. A 2015 survey by Oxford Brookes University found that half of the businesses arrived as start-ups and the reasons given for choosing Poundbury were the suitability of business accommodation, the quality of the infrastructure and access to customers.

From left:  
Sue McCarthy-Moore  
creates a new piece in  
her workshop; Peter  
Claxton of Dorset  
CycleLife; Bonjour  
café and patisserie



# “MIXED-USE ADDS VITALITY AND VIBRANCY TO A PLACE”

– BEN MURPHY, ESTATE DIRECTOR FOR THE DUCHY OF CORNWALL



“Mixed-use adds vitality and vibrancy to a place, unlike homogeneous housing estates. Poundbury is about creating lifestyles that are beneficial to health and well-being, as well as to the environment, society and the economy,” says Ben Murphy, Estate Director for the Duchy of Cornwall. “We don’t deny the existence of cars – we build two parking spaces per home – but you don’t need to drive here.”

Murphy says that The Prince’s Foundation has learnt from Britain’s historic market towns that mixed-use works. “The nation lost its way after World War Two and no one was building mixed-use, so what we were doing was radical but we’ve shown

that it can be commercially viable. Central to the project is patient capital and sharing a vision with the local authority. With a big strategic project like this, if you get the first phase right then you see the added value of quality place making.”

Poundbury offers a wide range of commercial spaces from small studios and storefronts to purpose-built office blocks and industrial units. The variety of businesses reflects that, from artisanal coffee shops and family-run boutiques to global brands such as Dorset Cereals and House of Dorchester, which were both established here and have rapidly grown. Rents are also lower than the average high street, due to lower



footfall, making it attractive to budding entrepreneurs. The 2018 Poundbury Economic Impact Assessment by the Dorset County Council found that West Dorset now receives £98 million per annum through the increased demand for goods and services and 1,630 full-time jobs have been created. “Retail has struggled here as everywhere else in the UK due to the economic climate, but overall we’ve exceeded our goals and Poundbury’s business community is maturing nicely,” says Murphy.

Peter Claxton of Dorset CycleLife arrived in 2014 and also owns a home in Poundbury, as do his parents. He attracts customers from across the region to his

electric bike store. “From a business perspective, the demographic in West Dorset has a good proportion of retirees who care about the environment and have the leisure time to invest in an ebike,” he says.

Dorset CycleLife is now Raleigh’s biggest dealer in the West Country. “I used to have a shop in Poole and customers had to park half a mile away. If they wanted to go for a test ride it was all cars and buses, which made things really difficult. In Poundbury, you can park outside the shop and ride on clean, quiet streets. So for us – selling something of value that needs to be bonded with, felt and experienced – it’s a dream situation.”

From left:  
Fina coffee shop  
in Poundbury;  
locals enjoy a pop-  
up barbecue courtesy  
of Brace of Butchers;  
aerial view showing the  
seamless integration  
of employment uses



COULD PUBLIC OPINION ON BEAUTY  
BE KEY TO TACKLING THE HOUSING  
CRISIS? BEN DERBYSHIRE AND  
GEORGE SAUMAREZ SMITH TAKE  
THE DEBATE HEAD-ON

# BUILDING BEAUTY

Beauty is back on the housing agenda thanks to the government’s 2018 Building Better, Building Beautiful Commission. We sat down with Ben Derbyshire, President of the Royal Institute of British Architects (RIBA) and architect George Saumarez Smith to talk about how a focus on better design and style may be the key to getting new homes built.

Do you think the debate about beauty has been helpful or unhelpful over the last 40 years?

**George Saumarez Smith:** I started in architecture school in the early 1990s, so to me that polarised world of style belongs to the 1980s. I don’t think it’s healthy to dredge that up again because a generation who were practising then still carry the scars of those battles and it holds them back from talking about the things that architects have in common. I think there will be a big enough world in which we all need to be more understanding and embrace diversity by accepting other people’s points of view.

**Ben Derbyshire:** When I’ve previously talked with George about traditional architecture we’ve enjoyed a shared understanding and common enthusiasm for the traditions of building. And many of those are increasingly relevant in today’s world. We are rediscovering ways in which we can do things that are less damaging to the environment. I think we both regard this as being very important.

It seems we have reached a consensus quickly. So we all agree...

**GSS:** Not quite. There is prejudice about gender and race and religion in architecture, which is bad enough, why shouldn’t it also be about architectural style?

I don’t have a problem with anybody doing other kinds of architectural style.

**BD:** The difficulty is with those who believe there is one true way. As an individual, I have very catholic tastes. And of course, I represent a profession that is very diverse. But in the terms that George has mentioned, it isn’t sufficiently diverse. So we have to work on increasing its diversity in all ways in my view.

Pluralism requires different fields of expertise in the construction professions. Does that create a problem?

**GSS:** People often say to me, “You can’t do classical architecture any more because it’s not built the way it used to be built.” At which point I ask, “Which period are you thinking about? Are we going back to Greek antiquity? Or classical romanticism in France?” Classicism is actually a language that has little to do with material. We’ve become fixated with materials and the most respected architects are the ones who apparently use materials in the most honest way. But if you look back in history, materials are often used in very dishonest ways, often very successfully.

**BD:** I do think that there is a necessity for artifice. I have no problem with it at all. We can create familiar and acceptable environments out of prefabricated components and then dress them up. I personally don’t have a difficulty with decoration.

Should architects be given more leeway in being able to lead new developments and thus convince the NIMBYs who protest?

**GSS:** If you look at the general preferences amongst home buyers, the vast majority prefer something traditional. It’s deeply embedded in the British psyche.

Right: An architectural sketch of an apartment building in Poundbury by George Saumarez Smith, July 2007







Above: A rough sketch of Saxon Court and Roseberry Mansions, London, by Tim Crocker at MacCreanor Lavington

Home ownership is an important part of our culture. And we do feel quite strongly about plugging into history when we make that investment. When surveys are done that ask what kind of house you would like to live in and you show photographs of extremely modern houses versus very traditional houses, the traditional houses are always preferred. But not amongst architects. This is an uncomfortable truth for the profession.

**BD:** Only 30 per cent of the house-buying market would consider buying a newly built speculative home. Everybody else will buy in the second-hand market. The question is what are we talking about here? Are we talking about the impoverished nature of much speculative home building, which is a consequence of land prices? That's the central problem as Oliver Letwin has unearthed in his excellent review of this issue. [Independent Review of Build Out: Final Report by Rt Hon Sir Oliver Letwin.] Or is it a consequence of the fact that by the time the value's been taken out for the landowner, there aren't the resources left to provide diversity of product and richness of design. Oliver Letwin says these are necessary. And I agree with him.

**Do you think that modernists have retreated from discussing beauty. And if so, has this has perhaps been detrimental to their cause?**

**BD:** I was at a conference about perceptions of space – the way we perceive and understand space. And there were

presentations by neuroscientists and also by the architect Allison Brooks who said, "That's all very interesting, but we seem to have forgotten about beauty." So the first thing I'd say is beauty will continue to be fundamentally important. I'm not going to suggest on behalf of the modernist tradition that somehow or other beauty was not important, because I think it's clear that it is very important.

**GSS:** My own experience from architecture school was that aesthetic discussions are not encouraged. The way that architecture is taught is much more cerebral and the goal of a successful project is to take the seed of an idea and follow it through to its logical conclusion, even if that results in something that is wildly impractical, expensive and looks terrible.

**BD:** I did my RIBA Part I from 1971 onwards, and there was an absence of aesthetic discussions and the history of architecture. I would also suggest in respect of classicism that it's had a bad rap. From the way I was taught, and the visits that I make to schools, it's not encouraged. And therefore, if you're an enthusiast for it, that's tough.

**GSS:** And that's still the case now.

**BD:** It is. I'm doing what I can, so in the RIBA Award scheme, in our latest review of the awards, we are nailing the point that the aesthetic tradition being followed by the scheme in question is not the issue. Things are not to be ruled out on

account of the aesthetic tradition in which they are designed. Because people by and large attempt to work within some sort of set of aesthetic constraints that help them towards an elegant resolution of the design problem.

**GSS:** On the question of developing new architectural languages, again, my experience was that if you wanted to do a scheme that would meet the teacher's approval, copying something out of The Architectural Review was pretty safe. Yet surrounded as we were by streets of Georgian buildings throughout Edinburgh, if you dared try and copy one of them all hell would break loose. Classicists are often labelled as copyist, however, just because you're working with an established language, it doesn't mean that you have to copy things. But certainly imitation should be an important part of the education process.

**BD:** Yes, the recording by drawing of successful architecture whether it has an architect involved or not, in my view is a very important part of architectural education. So we can agree on that, too.

**Do you think there's too much focus on individual buildings here? How comfortable are you with the word "place"? Is placemaking something you can both get on board with?**

**GSS:** One thing that has changed very significantly in the past 30 years is that most architects have found a lot of common ground in the field of urban design. And that everybody agrees that placemaking, walkable neighbourhoods, medium-rise developments and good landscape are sound goals.

**BD:** I think for the last 30 years we've all been busy assimilating the proper understanding of what it is and how to deliver it. I think it is more than a skin and I think the functionality and the spaces within it and the way in which they enable a good life to be led by a family is immensely demanding of skill and knowledge.

**Can you plan for pluralism?**

**BD:** Some of my favourite places are driven by a discipline

in the layout of streets, but many are also incredibly tolerant of different styles and therefore able to accommodate pluralism. And you can say that of some of the side streets of Amsterdam and the Lower East Side in Manhattan. They're not only tolerant of style, but tolerant of scale as well.

If you sought out the underlying drivers you'll find, as in all of these various different manifestations of high-quality places, what you might call traditional good looks. Basically good-looking buildings that people think, "Oh, that's solid. That's going to last. That's my family home. I want to invest in it."

**GSS:** One of the criticisms of Poundbury is that there is too much variety in it. People criticise it for being traditional but there's no problem with a place that is entirely traditional in character. If you look at Primrose Hill or other areas that were developed over a similar time span and are a similar size to Poundbury, it's just street after street of repetitive types. And people love it. So I think that variety is not necessarily such a good thing.

**What does beauty in architecture mean to you?**

**GSS:** It's extremely difficult to define or even debate with people because it is so much in the eye of the beholder. But I think that something must come about from visual harmony and this is something that goes back to Ian Nairn's Outrage writings in the The Architectural Review and his problem with visual clutter in the built environment, which I think we still have a big problem with.

**BD:** I think order is what people need. Order in their lives and in their environments. And I think you can order things in different ways but order is very important.

**GSS:** Order and repetition are not visual problems, they're accumulative. It creates richness, different to the repetition of volume house building and that strange, false individuality in a very ordered landscape; whereas a visual order of any kind of any period of any style is self-expressive, collective and cumulative.

## A DESIGN FOR LIFE

In June 2018, the think tank Policy Exchange published a report called Building More, Building Beautiful. Using extensive popular polling as evidence, the report stated that the housing crisis would only be solved if the developers of new homes put more emphasis on design and style to gain the support of existing

communities. The response from the government was enthusiastic and the Building Better, Building Beautiful commission was set up to gather evidence and advocate for better designed housing throughout the country. Beauty is back on the agenda and a nationwide discussion has begun.



3%

of people believe the community has most say over how we design new homes and communities\*



79%

of people support garden cities\*



85%

said new homes should fit in with their more traditional surroundings or be identical to the homes that are already there\*



CUSTODIANS OF LAND WHO ARE  
TAKING THE LONG VIEW WHEN IT  
COMES TO DEVELOPING THE NEXT  
GENERATION OF GREAT PLACES

# LANDOWNER LEGACY

It is easy to forget that building homes is about more than just numbers. As the Royal Society of Arts pointed out in its London-focused 2017 report *Scale to Change*, the quality of our built environment is also crucial. “Without a considered and flexible housing mix, and support for the institutions and facilities which are vehicles for social mixing, large-scale housing development risks becoming one-dimensional communities, rather than great places that build social capital locally,” it stated.

This is no less true in the rest of the country. Most of the housing in the UK continues to be built by a few major housebuilders, who are increasingly coming under fire for producing poor quality homes and badly designed streets. In response, more landowners are choosing to develop their own land rather than handing it over completely to a volume housebuilder.

“If we had worked with a development partner, there wouldn’t have been enough value in the land to



Clockwise from centre:  
Simon Barton in Barton's  
bus depot in Nottingham,  
owned by his family since  
1913; Simon with his  
sons on the site of their  
development; an original  
Barton sign; a rendering  
of terraced houses at  
The Barton Quarter







## “IT’S FASCINATING HOW MUCH OF A DIFFERENCE A GOOD DESIGN CAN MAKE. THE BENEFIT TO PEOPLE’S HEALTH AND WELLBEING IS SO STRONG”

– CAROLINE FIFE, LANDOWNER, CHAPELTON



Clockwise from top right: Landowners Caroline and David Fife at their Chapelton development; a row of houses at Chapelton; the Teacake coffee shop and Chapelton Visitor Centre

make it attractive to a developer and leave anything left over for us,” says John Moray, the Earl of Moray. His family business is developing a 5,000-home village called Tornagrain on their estate near Inverness. Nestled in a rolling rural landscape a few miles from the Moray Firth, its architecture and planning is inspired by that of the surrounding Scottish highlands, with low-rise, traditional buildings linked by greenery and walkable streets. “It has been expensive, but we don’t regret it because we have complete control of a project that will probably go on for the next 50 years,” says Moray.

Custodians of land are well placed to make a success of such projects because of their long-term view. “We are going to be around for a long time, so we’re incentivised to do a good job,” says Moray. “We can wait for our payback because we’re not sitting on targets where we have to make our investment back in five years like so many companies.” Ironically, this approach is already bearing fruit. Moray says the properties are selling twice as quickly as they expected.

He believes this is largely down to putting the wishes of potential residents for traditional architecture at its heart. “People love the idea of living in a period house, but one that’s well-insulated, warm, comfortable and fit for the 21st century,” says Moray. Perhaps as important is the neighbourhood’s walkability and community facilities such as allotments, tennis courts, bicycle routes, footpaths and parks.

This is in keeping with the principles outlined in *Building A Legacy – A Landowner’s Guide to Popular Development*, published by The Prince’s Foundation in 2017, aimed at helping landowners build the kinds of homes and neighbourhoods people want, rather than those that are forced upon them. Among these principles are respect for the local context, character

and scale, as well as thoughtfully designed public spaces, connectivity, craftsmanship, community and commercial opportunities. It emphasises the power of landowners to challenge normal development practice, and provides the example of Chapelton, a development eight miles south of Aberdeen that will ultimately have 4,045 homes.

Chapelton is being developed by David and Caroline Fife, the Duke and Duchess of Fife, who visited the Poundbury development in Dorchester for inspiration. In that vein, their design is inspired by the architectural traditions of the local historical towns – a self-contained town with a series of neighbourhoods, each featuring homes of a variety of styles and for various needs, plus forest walks and a harbour on its doorstep. “I was very struck by Poundbury where you feel you are providing more than a house – you are providing a whole way of life,” says Caroline. “It isn’t just for families of a certain age, it’s for old people and young people, and it’s community minded. For me that was a vital part of what we were trying to achieve.”

Caroline says this is becoming apparent in the sections of the scheme that have been completed so far. “Everybody who comes here says it’s like being a part of something. The lane design and green areas have meant that residents are often on foot and because they meet one another, it has brought about a great feel of community. It’s fascinating how much of a difference good design can make, and while it might cost the developer slightly more at the outset, the benefit to people’s health and wellbeing is so strong.”

Inevitably, it’s a process that requires long-term commitment, she says, but their personal interest in the project has smoothed the way. “We’re deliberately collaborative. We’ve always explained everything and



“WE’RE GOING TO BE  
AROUND FOR A LONG TIME,  
SO WE’RE INCENTIVISED  
TO DO A GOOD JOB”

– JOHN MORAY, LANDOWNER, TORNAGRAIN

been honest, and asked people whether there are any solutions that are lacking in the area, so both our own residents and the wider local area have engaged with us.”

Taking the same view is the Barton family, who have run buses in Nottingham since the early 20th century and acquired land in the city over the years. Simon Barton is the fifth generation descendant of the company founder Thomas Henry Barton and feels affinity with the area. “We moved to the area as a family and as a business in 1913, and then patiently acquired many neighbouring properties over a period of 100 years or so,” he says. The company has teamed up with The Prince’s Foundation and Stockbridge Land to put together a proposal for a new development on a brownfield site in Nottingham previously used by the business, close to a golf course and nature reserve.

“I live half a mile away from the site,” says Barton. “If you want to stay in your community, rather than take the money and head for the hills, and if you have the resources and the ability to do that, why shouldn’t you?” The proposal is for The Barton Quarter, a development with 250 homes – some affordable – and green spaces, designed by the Foundation and renowned architect Ben Pentreath.

Despite now having a developer on board, the family business retains a hands-on role, says Barton, admitting that many would see this kind of project as a challenge. “Money talks and if the alternative is to get the cash up front and do no work, a lot of people would do that.” But he believes that’s partly because there’s little incentive for businesses like his to do what it’s doing – for example, a previous planning application for the site was rejected, he claims, for being “too high quality”. “We’re a brownfield site and every government has claimed to wish to see brownfield development, and yet it still faces challenges.”

It is clear that the current development system does not encourage such initiatives. Moray agrees with Barton, claiming that the process Tornagrain went through has been as onerous as it would be for a conventional development, even though the initial costs are at least 20 per cent higher. “We’re not incentivised to do what we do. If the government wants a better level of planning, there has to be some way in which that’s made more worthwhile for landowners to take an approach that is longer term and potentially less profitable early on.”

At present, the urgent imperative for new homes rewards developers who build fast and sell quickly, rather than those who think about legacy. In the 2018 budget, the Chancellor announced a host of measures designed to support “patient capital investment”, including a £2.5 billion public fund for businesses that have high growth potential in the long run. The Prince’s Foundation also suggests that landowners who cannot afford to develop land on their own enter into consortium agreements with developers or investors that allow them to retain responsibility for masterplanning and set out common aspirations, high standards for design and obligations for both parties.

But ultimately the success of a new development is contingent on how much its stakeholders care about the final outcome. The advantage that private landowners have is that, if they choose, they can refuse to sell to the highest bidder and instead take an active role in creating a neighbourhood that stands the test of time. “It’s not for the faint hearted – you need to have a steady nerve, be comfortable with a certain level of debt and be prepared for a long payback period,” says Moray. “But it can be just as profitable as conventional housing over the long-term and it’s certainly rewarding.”



Clockwise from left:  
Landowner John Moray  
and Tornagrain Development  
Manager Nicole Petrie study  
a plan of the estate; colour adds  
interest and variation to the  
houses; locally sourced materials  
were used in the estate's  
construction; a view leading  
into the picturesque new village



Photography by Chloé Grayson, Sarah Ferry, Steven Gallagher





STEADILY GROWING IN STRENGTH ARE A NUMBER OF SMALLER HOUSEBUILDERS OFFERING QUALITY WORKMANSHIP, FAST DELIVERY AND THE CHANCE TO DIVERSIFY THE HOUSING MARKET

# SMALL BUILDERS MATTER

CG Fry & Son Builders was set up just after World War One when Charles George Fry came out of the army and returned to his home village of Litton Cheney in Dorset. Still in the family, the company is now run by Charles’ son Philip and has become a successful local housebuilder. From its beginnings in 1918 making wheels for wagons, the company has grown to the point where it is building small sites across the south west of England. “Local builders understand the quality required and their reputation locally relies on providing a good product,” says Philip Fry. “There is also a quick decision-making process compared to the volume builders who generally only care about the numbers of units delivered and tend to have long chains of command.”

CG Fry’s story though takes place against a backdrop of consolidation. Today, housing is mainly delivered by a system where the company that builds the cheapest gets to build the most. The buying power of the volume housebuilders means they can build at low cost and offer more money for land up front, effectively reducing the opportunities for those



Clockwise from left: A pedestrian-friendly street in Nansledan; a local Newquay surfer; some of the recently completed homes in Nansledan; a circular window adds character to one of the houses

smaller firms, making widespread access to land difficult to achieve. These players currently build more than 80 per cent of new homes. But models like those championed by The Prince’s Foundation help to diversify the housing market, provide training for future generations, and offer local solutions. It also addresses the traditional supply chain to give smaller developers and builders like CG Fry & Sons a chance.

The scale of the medium builder can bring many benefits. Peter James, Project Manager for the Duchy of Cornwall, the landowner behind Poundbury and Nansledan, prefers to work with local builders. “If landowners want quality and a long-term legacy, as well as a good return on land values, they need to work closely with developers to ensure their vision is delivered,” he says. A level of trust has built up between CG Fry & Son Builders and the Duchy of Cornwall throughout the years. “Initially plans were very much prescribed to us, however we now work more in partnership with the Duchy of Cornwall allowing us to influence the design to help drive the commerciality of the development,” says Fry.

This relationship has the potential to play out at a national level. In recent years, small and medium firms



have begun to emerge as genuine players in the attempt to tackle the housing crisis. Savills sold 89 per cent more plots to small housebuilders in the year to June 2017 compared to the previous year. Diversifying the housing market allows these smaller enterprises to buy land at the right price and compete with the volume housebuilders. One way to tackle this is for consortiums of two or three small companies to work together on schemes, allowing them to share supply chains and expertise. This also gives them access to government finances such as the £3 billion Home Building Fund, which encourages and enables small and medium-sized enterprises (SMEs) to borrow infrastructure funding at favourable rates.

This method was used to build out Nansledan on the edge of Newquay in Cornwall; by far The Duchy of Cornwall’s largest development at 540 acres, and one of the largest house-building projects currently underway in the UK. When complete it will provide more than 4,000 homes as well as a new high street, a church, a school and public spaces. It is being built by a consortium of three small



“POUNDBURY HELPED SPREAD OUR NAME FAR AND WIDE AND WE HAVE LEARNT SO MUCH ABOUT CREATING QUALITY OF PLACE”

– PHILIP FRY, CG FRY & SON BUILDERS

to medium-sized building companies – Morrish Builders, Wainhomes and CG Fry & Son Builders. Throughout Nansledan’s 50-year build, it is hoped that they will see the whole thing through by taking it in turns to build out phases.

It is the latest episode in a long, on-going relationship with the Duchy of Cornwall. CG Fry & Son Builders was the first housebuilder to work on the Poundbury estate more than 20 years ago. “Poundbury helped spread our name far and wide and we have learnt so much about creating quality of place through vernacular design and master planning,” adds Fry. When they started there, the company only worked locally and their turnover was around £8.3 million a year. Now the company has an annual turnover of more than £84 million and works across the South West of England building around 200 homes every year.

It is a mutually beneficial relationship between smaller developers and landowners who prioritise placemaking. James warns though that one of the housing industry’s biggest threats to the delivery of quality housing is a growing skills shortage. “Building more homes in the UK can be done through the medium-sized homebuilders, but there is a massive skills shortage to deliver them,” he warns. This too is an area where The Prince’s Foundation offers support via its range of training courses in traditional crafts and building skills. Through education, and by opening up the market to smaller developers by making land accessible and affordable, the house market can truly diversify.

Clockwise from top left: One of the local children plays outside; detail of a drywall and slate street sign in Tregunnel Hill; a builder finishes tiling on one the roofs; bold colour is used throughout Nansledan



Photography by John Hersey



VOLUME HOUSEBUILDERS HAVE LONG BEEN ACCUSED OF CHURNING OUT POOR QUALITY HOUSING. BUT COULD CHANGES TO PLANNING POLICY MEAN THEY ARE NOW FINALLY READY TO DELIVER?

# SPEAKING VOLUMES



The volume housebuilders are often cast as the villains in any discussion about housing in Britain. If there is a shortfall in the number of houses being built, then surely it is the big guns that are somehow to blame? They are held responsible not only for the lack of houses being built, but also for a widespread dearth in design quality. They don't build enough and what they do build lacks quality, say sceptics. Large bonuses awarded to housing companies' CEOs seem to confirm the belief that the big housebuilders are benefitting from the high cost of housing in a market where demand is far outstripping supply.

This is not entirely fair, says Peter Andrew MBE, Deputy Chairman of the House Builders Federation, which represents companies that build around 80 per cent of Britain's homes. "The shape of the industry at the moment is an output of government policy over many years. Back in the early 1990s a new planning regime came in which changed the emphasis of development from a presumption in favour of development to a presumption in favour of the local plan," he says. This is commendable in theory: local authorities, with their knowledge and democratic mandate, choosing development sites. Unfortunately, in practice the effect has been disastrous. "At this moment, there are still local authorities that don't have an up-to-date local plan," says Andrew.

This legal move was not directly supported by the massive administrative, political and creative task required to deliver it. It has taken decades for local authorities to deliver these plans, in the meantime an artificial lack of land has been created. "Unwittingly, it allowed land to become a commodity," says Andrew.

Nick Tubbs has been developing property for 30 years, most notably at Sherford where there is planning consent to build 5,500 homes in what is effectively a new town. "There is not much agricultural land in the South East that is worth more than £10,000 an acre," he says. "But once land has consent for a predominantly residential scheme, when serviced, it will be worth more than £1 million an acre."

The big housebuilders say they have fallen foul of this system. Their upfront costs are so high that they cannot carry through on building quality housing with amenities. The new housing estate has thus

become a stain on the landscape and unwanted by locals. Tubbs believes that the only reason he was able to convince locals was because he adhered to a consultation process run by The Prince's Foundation. "If you know you have thousands of homes being built on your doorstep, you would object," says Tubbs. "However, once local people understood that we were working with them and really listening, the protests melted away. And we are building a large quantity of homes in one of the most beautiful parts of Britain. But it only works if you offer beauty."

Tubbs is working with not just one volume housebuilder but three: Taylor Wimpey, Bovis Homes and Linden Homes, and insists the houses they are producing are beautiful. How is he managing it? Largely through the foresight of the landowners. The consortium of local farmers were willing to take a reasonable profit for their land rather than an astronomical one that the market could allow. He's also been fortunate to work with the volume housebuilders at a moment when the political movement towards aesthetics has been encouraging.

For those less fortunate, the government is finally addressing the upfront costs, which the volume housebuilders say is inhibiting the delivery of quality places. With regard to land value, it is forcing local authorities to make local plans on pain of having their authority over-turned and development sites allocated by central government. National bodies such as the Ministry of Defence are supporting this by putting land forward for development and aspiring to be model clients. As Andrew puts it, the landowners are "staying in the game longer and taking their receipt later", which enables builders of these new villages or towns – because that's what these developments often are – to plan for schools, doctors' surgeries and shops.

Volume housebuilders claim that it's landowners and their agents with the precious commodity of land that has planning permission attached to it who have been bleeding them dry. "All that money that the developers have had to pay can't go into producing the place because there's only so much pie to go round," says Andrew. In the Garden Communities scheme, the government offers financial arrangements such as joint venture companies or development corporations to local developments to ensure main partners can take key decisions and use private sector finance most effectively. The Home Building Fund is also providing money for what Andrew calls "big ticket infrastructure".

Other means of pushing the volume housebuilders into new and challenging scenarios are being undertaken. As Ben Bolgar, the Senior Director for The



170,000

The total number of homes purchased through the government's Help To Buy Equity Loan scheme since it began in 2013\*



20%

The ideal profit margin that developers seek on their investment\*\*

Prince's Foundation wrote in an essay published by Policy Exchange referencing The Letwin Review of housing supply. "The Review concluded that we need to encourage greater diversity of housing types, as the existing narrow range delivered by the volume housebuilders isn't capable of being absorbed into the market quickly enough," he writes. Letwin suggests a number of ways in which volume housebuilders' skills can be used to provide a more sophisticated and nuanced housing provision

Despite this support from the government, most commentators feel that it is the constructive dialogue between authorities and housebuilders at a local level that will encourage quality housing. Local plans should be created to speed up the work of the housebuilder along with robust design codes setting out proportions and materials. Of course, local authorities will point to how stretched their resources are. In addition, Andrew believes it will take "another 20 years of oversupply of land to get to a place where we can meet the government's target of building 300,000 homes a year." It also remains to be seen whether the reforms to the planning system and infrastructure funding will make land any less of a commodity, and whether volume housebuilders are ever truly capable of delivering quality in terms of design and amenity when the culture is one of cost-cutting for short-term profit.



Left to right:  
The site at Sherford in Devon; some of the finished houses on the estate



# THE REGENERATION GAME

THE PRINCE'S FOUNDATION'S WORK TO RESTORE KEY HERITAGE BUILDINGS BACK TO THEIR FORMER GLORY HAS HELPED REVITALISE COMMUNITIES AND PRESERVE HISTORY

Clockwise from left: The tea rooms at Middleport Pottery; Clay College Stoke; a hanging sign outside the factory; the Burleigh Pottery factory shop



By the 1970s, many once grand English country houses were in a state of disrepair as the landed gentry, hampered by maintenance costs, abandoned them. In truth, few cared. Few aside from Kit Martin, an enterprising architect with a love of traditional architecture. Defying the consensus that working with country houses was financial suicide, Martin began buying and converting them into multiple dwellings by dividing the floor-plates vertically as opposed to horizontally. But to dismiss Martin as solely a property developer would be a mistake. His chief concern was the loss of architectural heritage.

“My father [Sir John Leslie Martin, lead architect of the Royal Festival Hall] was part of the modern movement, but a few of us thought there is a big part of our story that’s being lost,” he says. And so Martin became the saviour of the country house. Over the next two decades he converted numerous estates including the Royal Naval Hospital in Great Yarmouth. This caught the attention of HRH The Prince of Wales, who invited him to head up The Prince of Wales Phoenix Trust in 1996, which would eventually become part of The Prince’s Foundation. “The Prince of Wales was ahead of the curve, as he often is, in realising that it was many different types of buildings – mills, military buildings, mission halls – that were really at risk.”

To Martin’s eye, these decaying remnants of the industrial revolution were the potential salvation of the country’s declining post-war communities. By adapting the methods honed on country houses, Martin hoped to revive these landmarks, providing homes and, where possible, kickstarting regeneration. The restoration of Stanley Mills was The Phoenix Trust’s first project. Standing on the banks of the River Tay, six miles north of Perth, the mill sits in a dramatic setting that matched the aspirations of

founder Sir Richard Arkwright who in the 1780s sought “a razor in Scotland to shave Manchester”. The mills closed for good in 1989, but during the mid-1990s Historic Scotland embarked on an ambitious plan to transform one of the three principle buildings – Bell Mill – into an exhibition and visitor centre.

Despite this, the largest two buildings on the site – East and Mid Mill – were slated for demolition. In 1997, The Phoenix Trust proposed redeveloping Mid Mill into five townhouses and East Mill into 30 apartments, taking care to ensure that original features including stone staircases and Scotch slate roofs were retained. “It was an unbelievably risky project. We were coming out of a deep recession, it was in a remote part of Scotland and people hadn’t thought of living in large apartments in a block in the countryside. It wasn’t a tried model,” says Martin. The sensitivity of the scheme resonated with the locals. “Ten years after the initial sale, the majority of residents had not moved. And if they had it was within the scheme thanks to the variety of housing on offer.”

The project won a European Heritage Award in 2009, but more importantly its success emboldened The Phoenix Trust to press forward with another significant project: Anchor Mill in Paisley. Occupying a prominent site in the town’s heart, the mill had been a worthy foil to its neighbour, the 14th century Paisley Abbey until operations ceased in the 1980s. Rot quickly set in and the building, hitherto a source of town pride, degenerated into an unavoidable reminder of Paisley’s glum economic prospects. Various owners had attempted to resurrect the building to no avail. In 2003, The Phoenix Trust, now The Prince’s Regeneration Trust, proposed a complex mix of business space, private residences, car parking and public access to the vaulted atrium, all facilitated by a combination of public and private sector funds.



“It was a wonderful example of partnership,” says Martin. “We formed a steering group, which involved the council, private sector housing developers, supermarket operators and the design team. When you have a complicated partnership somebody has to thump the table to keep up momentum. You cannot let the failure of one partner bring down the project.” And important partners did pull out. Bryant Homes was bought out by Taylor Woodrow, which promptly jumped ship. Kier replaced the appointed contractor, Lillleys. And Safeway was taken over by Morrisons. However, with a new store planned on a brownfield site next to the mill it could not risk failure and contributing to the revamp of both the mill and a historic footbridge linking the site to the town. “People could see that the whole project was moving forwards,” says Martin.

Anchor Mills proved a restorative tonic for the town. The loss of the building would have been yet another body blow to a community punch-drunk from lack of opportunities and investment. “Deindustrialisation has without a doubt had a negative impact on Paisley’s economy,” says Mhairi Black, MP for Paisley and Renfrewshire South. “Many people have spoken to me about how pleased they are that these buildings still stand. Seeing these huge industrial stalwarts converted into business centres and residential buildings has played a significant role in the recovery of the economy.”

Anchor Mills is a symbol of a brighter future, but subsequent projects have been no less emotive. Bentley Priory, for example, afforded the opportunity to preserve not just a historic building, but to keep a story alive that may have become a footnote in a textbook. A grand country estate of the sort eviscerated by the frenzied post-war demolition, its elegant Soane-designed interiors formed an unlikely backdrop to the Battle of Britain. During World War Two, Air Chief Marshal Lord Hugh Dowding adopted the building as Headquarters Fighter Command. To lose it would have been to discard a vital fragment of the country’s history.

Again, The Prince’s Regeneration Trust which officially merged into The Prince’s Foundation in 2018, later reconciled a disparate collection of private and public sector groups – relying primarily on the trade of luxury apartments to pay for the building’s survival. Converting the upper floors into flats cleared the way for the principle rooms to become a permanent exhibition documenting the exploits of Bomber Command for generations to come. The common thread across the buildings is the adroit handling of

private and public interests coupled with a hard-headed pragmatism. With Bentley Priory, service charges for the apartments funded the cost of the museum. In the case of Anchor Mills, the supermarket contributed to the restoration of the building.

These delicate negotiations are poised to get a great deal harder in the future as investment funding is drying up. “We are reaching the end of a golden age of heritage funding,” says Tiva Montalbano, Senior Project Manager (Heritage) at The Prince’s Foundation. “The National Lottery Heritage Fund has funded £6 billion in heritage projects since it was set up in the 1990s. This is an unprecedented windfall, but since the economic downturn it has become apparent that we are not great at the long-term sustainability of heritage buildings.” Montalbano says that securing an upfront injection of public cash is futile if the business case isn’t resilient. “What happens when you need to repair the roof in 10 years? It is unrealistic for organisations managing historic properties to expect them to just survive.”

Middleport Pottery in Stoke-on-Trent is a case in point. Home to Burleigh Pottery since 1889, the business was teetering on the abyss in 2010. Leaking roofs, drafty workshops and unwelcome feathered guests contributed to the once robust Victorian brick building cutting a sorrowful figure. In July the following year, The Prince’s Regeneration Trust stepped in to revive its flagging fortunes through a now familiar combination of revenue streams with HRH The Prince of Wales giving a strong impetus to the project. On completion three years later, the newly improved Middleport Pottery, renovated by architects Feilden Clegg Bradley Studios, boasts a gallery, studios and a tea room without compromising the character of the building. A new training programme focuses on developing traditional craft skills in the community. “The restoration turned Middleport into a viable business,” says Montalbano.

However, for every Middleport, Anchor Mills or Bentley Priory there are countless failures. Above the drone of the Spitfire flyovers that heralded the reopening of Bentley Priory in 2013, HRH The Prince of Wales warned of the fate that awaited the building if the scheme had failed. “So often, when these sorts of sites are sold, if you are not careful, they end up in a disastrous situation,” he said. Martin urges others to continue The Prince’s Foundation’s work. “We have taken these risks and shown these large projects are possible and sustainable long-term. And now it is time for other people to form partnerships and do the same.”

Clockwise from below: Hand-made pottery in progress at Middleport Pottery; items of finished Burleigh pottery; the original Pottery as it looked in 1889

“THE PRINCE OF WALES WAS AHEAD OF THE CURVE IN REALISING THAT IT WAS MANY DIFFERENT TYPES OF BUILDINGS – MILLS, MILITARY BUILDINGS, MISSION HALLS – THAT WERE REALLY AT RISK”

– KIT MARTIN, ARCHITECTURAL DESIGNER





THE SHARD

310m

ONE CANADA SQUARE

236m

110 BISHOPSGATE

230m

122 LEADENHALL ST.

225m

NEWFOUNDLAND QUAY

220m

ST. PAUL'S  
CATHEDRAL

111m



WITH HIGH-RISE RESIDENTIAL BUILDINGS ON THE INCREASE, A GROWING BODY OF PROFESSIONALS IS CALLING FOR NEW SOLUTIONS TO HELP THE UK'S DENSIFYING CITIES

# NEW HEIGHTS

Development pressures facing UK city centres have never been more intense. The past quarter of a century has seen a dramatic increase in the urban population, fuelled by globalisation and government planning policy. Generally this is good news. After years of decline, life has returned to many previously moribund city centres. However, the relatively free market has also unleashed a rise in the number of tall buildings, which are beginning to radically alter the traditional urban form. In London, 510 tall buildings of more than 20 storeys were in the development pipeline in 2018, according to an annual survey by built environment forum New London Architecture (NLA). Of these, 90 per cent were for residential uses.

Is building high really the best solution for housing the growing numbers of people in our cities? Architect Barbara Weiss runs the Skyline Campaign, set up in 2014 to argue against the significant impact on London caused by the current proliferation of skyscrapers. "Our campaign is not anti-tall building, but we are against badly designed high-rises in the wrong location," she says. "I am a big fan of New York, which has historically done high-rises very well. But high-rises are not part of London's DNA." Weiss's viewpoint epitomises a general feeling that the situation in London has got out of hand.

Economics play a large part in the number of applications coming forward for tall towers on



Just 8 per cent of those interviewed for an Ipsos MORI poll for the Skyline Campaign in late 2016 thought tall buildings were the best answer to London's housing needs\*



# “YOU CAN OFTEN GET JUST AS MUCH ACCOMMODATION IN A MID-RISE AS IN A HIGH-RISE”

– SIR TERRY FARRELL, ARCHITECT AND URBAN DESIGNER

unsuitable sites, according to Elliot Lipton, Managing Director of development firm First Base. The scarcity of development land in the capital means that “in order to make the viability argument work, developers end up having to push the building higher and higher,” he says. Yet the economics don’t always play out well for the users. Leading architect Sir Terry Farrell says tall buildings automatically come with higher costs such as the provision of lifts and concierge staff, plus more intense and complicated maintenance. This tends to reduce the ability to provide adequate levels of affordable housing. “These buildings don’t tend to stack up for anyone but the rich,” says Farrell.

However, there is another solution. In 2016, Farrell, along with the Skyline Campaign, played a major role in forcing the redesign of the 72-storey Paddington Pole tower, which was proposed by Italian architect Renzo Piano. After a public furor, plans were revised and the proposed height was slashed to just 14 storeys, but crucially, the overall size of the scheme remained roughly the same. “This shows that you can often get just as much accommodation in a mid-rise building as in a high-rise,” says Farrell. Lipton agrees, pointing to a common, and often damaging confusion over terminology. “Sometimes people think that high-density developments automatically mean high-rise buildings, but that is not the case. Some of our highest-density areas are actually our most popular – in Kensington or Maida Vale, for instance – but they also don’t rise very high at all.”

In the UK context, mid-rise developments work much better at creating the right conditions for human living, according to Lipton. “In the US, some of the taller buildings don’t seem as overbearing because they are located on wide boulevards, allowing a greater feeling of light and space,” he says. “We don’t have that luxury on most of our city centre sites.” In addition, lower, wider buildings allow the creation of multiple cores. “This means you have a more reasonable number

of homes per lift, so you are more likely to recognise and bump into people, creating a better sense of community,” Lipton adds. Mid-rise buildings work particularly well for providing accommodation for families says Weiss. “If you have younger children, it is much nicer to be closer to the ground – they can see their friends playing and dash out to join them. It is also easier for shopping and getting prams up and down; there is a big age group that shouldn’t be forced to live in tall buildings.”

At the award-winning, 119-home Highbury Gardens scheme in Islington, First Base demonstrated that when designed well, mid-rise housing can achieve high density at the human scale. Set in a sensitive location between two conservation areas of Georgian and Victorian architecture, the contextual design was critical to achieving acceptance within the existing north London community. The scheme was able to achieve a high proportion of affordable homes. “One of the great things about the mansion block typology is that the building form is incredibly efficient. You only have to make small, inexpensive changes – such as adding a balcony or a different style of window, or altering the wall materials – to achieve differentiation and variety between buildings. We also focused spending on the façades and entrances, and saved money in less visible areas, for instance by designing around an off-the-shelf lift system.”

Reproducing such successes and reducing reliance on high-rise buildings in the future will not come through guidance or restrictions on tall buildings, says New London Architecture Chairman Peter Murray. Rather, planners should be better equipped to shape the urban environment. “We don’t need more guidance, we need better urban design,” says Murray. “Local authority planning departments should not only be regulatory, they should also be creative. They need the statutory powers to shape the city in the same way that private landowners are able to shape their developments.”

Right: Highbury Gardens in Islington, London – a good example of a new mid-rise building of mixed affordable housing

Photography by India Hobson, Andy Donahue \*Source: The Financial Times, 2016





COULD THE REDEVELOPMENT OF POST-WAR COUNCIL ESTATES BE THE KEY TO PROVIDING MORE HOMES AND GREATER INCLUSIVITY ACROSS THE COUNTRY?

# GREAT ESTATES

In September 2018, the Office for National Statistics estimated that London needs to provide an additional 844,000 homes by 2041 to cope with its growing population. With development land in the capital in short supply, building on previously developed sites is likely to play a major role in meeting this need, especially when it comes to social housing provisions. Because council estates are largely in the ownership of a single public sector landlord, the proposal to redevelop them potentially offers a solution to providing large numbers of new homes. However, a number of recent attempts to reconfigure council estates were met with fierce opposition from wary residents, fearful of being pushed out of their homes to make way for wealthier residents. So how can we regenerate London’s inner-city estates while tackling the growing problem of social segregation?

Experts agree that many post-war estates are long overdue for redevelopment. According to Nicholas Boys Smith, Founding Director of research institute Create Streets, “The unpopularity of these estates became clear almost the moment they were built, with tenants often reluctant to move into them”. Under-resourced management was often accompanied by poor

construction standards, exemplified by the Ronan Point tower block disaster of 1968, when four residents were killed after a partial collapse. But Boys Smith says the problems went far deeper – to the design philosophy that guided the new communities. “Instead of creating streets, the architects planned confused semi-private, semi-public spaces with very little sense of place.”

David Lunts, Executive Director of housing and land at the Greater London Authority (GLA), points to the Urban Village model that he helped to develop in the UK during the 1990s as a sustainable alternative. Based around medium-density housing, a greater mix of uses, good transport connections and an emphasis on public space, the model has proved successful around the country. “The urban village sprang from asking why people were so opposed to the characteristics of places we were building after World War Two,” says Lunts. However strong the arguments for replacing the estates, he insists that agencies embarking on large-scale regeneration projects need to ensure that existing communities are fully engaged with the process. “My experience is that if projects are properly handled, residents are interested in improving their environments.”

Clockwise from right:  
A row of new social houses in Union Square on the Packington Estate, the design of which complements the neighbouring Victorian houses; one of the local residents; a view of the Estate from Regents Canal



This, Lunts says, is even more important now that London Mayor Sadiq Khan has introduced a rule that proposals, including the demolition of social housing, must pass a resident ballot before they are granted GLA cash. “It is important to be transparent and engage with residents around options, appraisals and the principle of redevelopment, and be clear if it looks like a radical regeneration involving demolition might be necessary.” The regeneration of the 1960s Packington Estate in Islington by housing association The Hyde Group, which began in 2006, saw 791 homes replace the 538 originally on the site. Lessons learnt from the project were compiled into a document – Estate Regeneration: Six Steps to Success – produced by the association in conjunction with The Prince’s Foundation.

The steps outlined include implementing flexible, long-term funding arrangements; supporting councils to become long-term investors in communities through funding and practice changes; consulting communities early on; keeping the dialogue going over time; addressing misconceptions around high density through good design; and reducing regulations to support building that meets popular preferences. The Packington Estate regeneration replaced the confusing and overwhelming urban 1960s form with a traditional block and plot structure. A proposal for a high-rise development was superseded by medium-rise buildings built to high architectural standards, which made no visible distinction between homes occupied by social and private tenants.

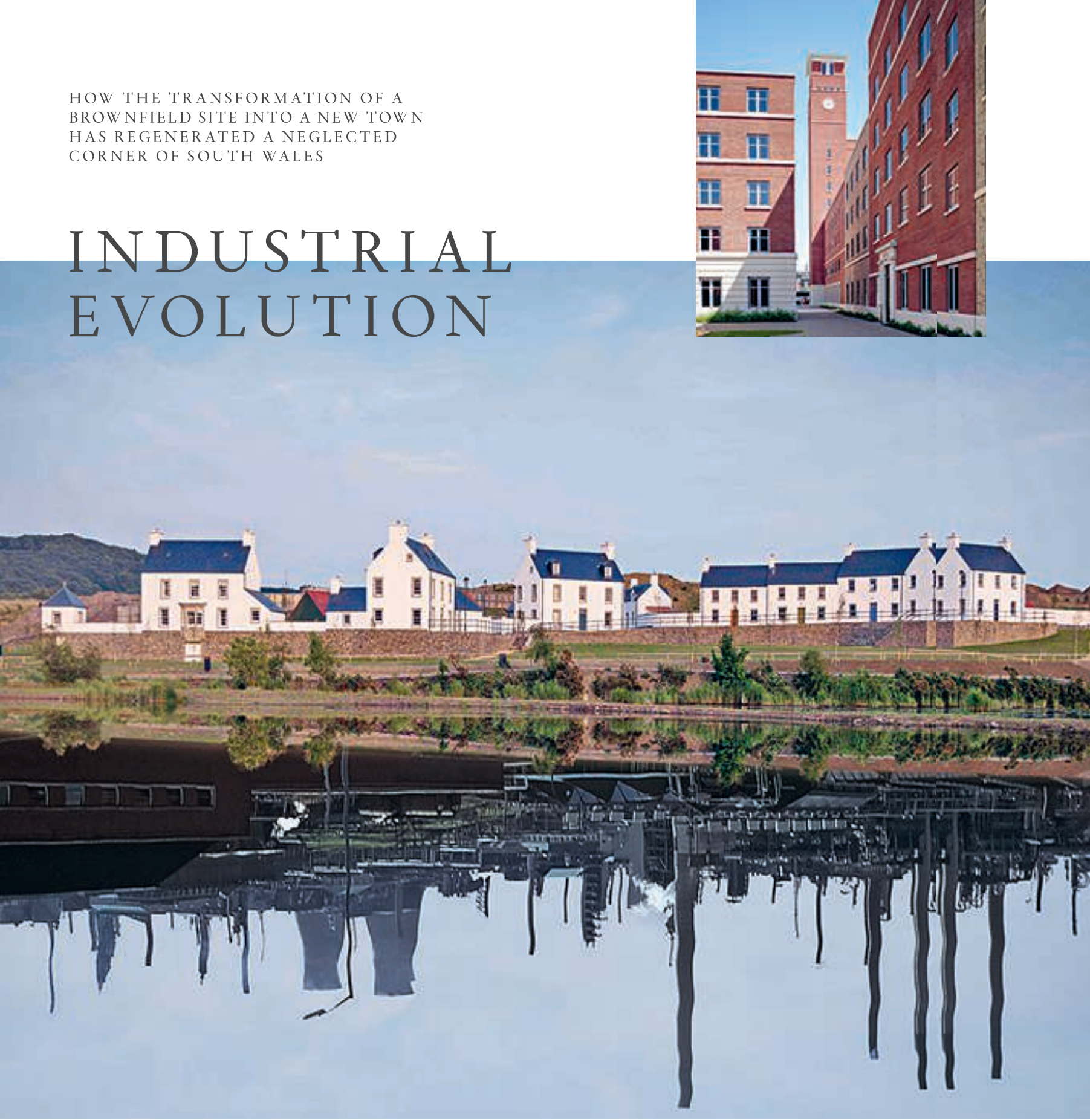
Carol Carter, former Group Director of Housing at The Hyde Group, says that resident buy-in is the crucial ingredient. “As soon as there’s a prospect of a regeneration project getting off the ground there needs to be investment from that point, through the whole process, and afterwards, to engage with residents,” she says. “It takes a huge amount of effort but you have got to be in a position to explain complex matters that non-technical people can understand.” Commitments to tenants that they would not be forced out by the redevelopment were also vital, Carter points out: “That was the great thing about Packington – all the people had an opportunity to return and nobody was discriminated against.”

A study by property consultancy Savills from 2016, estimated as many as 360,000 additional homes could be provided within London’s existing local authority housing estates. The opportunity is huge, but it will only succeed if existing residents are treated as genuine partners in any regeneration proposals. There is a similar opportunity across other cities in the UK.



HOW THE TRANSFORMATION OF A  
BROWNFIELD SITE INTO A NEW TOWN  
HAS REGENERATED A NEGLECTED  
CORNER OF SOUTH WALES

# INDUSTRIAL EVOLUTION



**From left:**  
The new Coed Darcy  
town in Wales built  
on the site of the  
Llandarcy oil refinery;  
Swansea University's  
award-winning  
Bay Campus

Any journey to the Welsh city of Swansea at the end of the last century took drivers on a route past the hulking carcass of BP's Llandarcy oil refinery – a vast industrial site that at one point was one of the region's largest employers. After 60 years of production, BP started shutting down operations in the 1980s, leaving behind what was labelled as one of the most polluted sites in Europe.

The transformation since then has been remarkable, with an ambitious regeneration project turning these tarnished brownfield remains into one of the region's most dynamic new developments. Boosted by £1 billion of investment, and a collaboration between the local council, property developer St. Modwen and The Prince's Foundation, the project has seen various parts of the former refinery revived, spearheaded by the creation of Coed Darcy – a new town designed with sustainability in mind. Over the course of 25 years this large-scale settlement will deliver 4,000 houses, schools and green spaces, as well as retail and commercial units. The area has been further galvanised by the construction of a major new campus for Swansea University on a related refinery site just a short distance away.

"We want to create a new centre of gravity for the region where people want to invest," says Steven Phillips, Chief Executive of Neath Port Talbot Council. "It's such a vast site – it's right by the motorway and serves as a gateway into Swansea." However, getting the project off the ground came with some major challenges, not least how to turn contaminated land into viable real estate. "There was a gap of almost 10 years between the closure of the refinery and getting the planning consent as we couldn't build anything on it until we'd cleaned the place up," says Phillips, adding that BP had aided development by leaving a dowry to help clean the land after its departure. "We've had to go through an exhaustive process with the Environment Agency to satisfy them that what we were doing complied with government policy."

The comprehensive remediation process was overseen by St. Modwen, which took over the site in 2008. Working alongside environmental consultants, the company employed sustainable, innovative methods to transform the contaminated land, including biodegradation techniques using

microorganisms to clean up the soil. During this period, 600,000 litres of oil and 200,000 tonnes of concrete were recovered from the site. In addition, more than 100 kilometres of pipeline and cables were removed. Most of these reclaimed materials were then recycled on site in innovative ways. The biodiversity of the area has, against the odds, been enhanced with the protection of sensitive species and the provision of additional habitats.

Once the remediation had taken effect, building began in earnest on the town of Coed Darcy. In conjunction with The Prince's Foundation, a design code and masterplan were established with a vision to create a lasting community. Houses of mixed price and tenure are being built using local materials with a layout based around three neighbourhoods linked by village greens and cycle paths. Coed Darcy – named after the Darcy woodland that once stood there – will ultimately be populated with local plants and trees. "The Prince of Wales took a strong interest in what we were doing and was keen that we used sustainable principles," says Phillips.

Alongside Coed Darcy's residential districts, a business area has been established, which currently houses more than 100 tenants and provides employment to about 1,500 people. In addition, the arrival of Swansea University's Bay Campus, which welcomed its first intake of students in 2015, bodes well for the area's future, bringing with it further scope for skilled employment. Overlooking Swansea Bay, this award-winning development, led by The Prince's Foundation with Porphyrios Associates, spans 65 acres and the construction of its student accommodation and state-of-the-art academic and research facilities saw 183 contracts awarded to Welsh companies.

"We've relocated our engineering, management, computer science and mathematics departments to Bay Campus to give these disciplines room to grow," says Iwan Davies, Senior Pro Vice Chancellor at Swansea University. "There's a huge opportunity for big industry to locate in the region. We're looking to create an environment where young people can spin out their ideas into small incubator units, and we can attract big business with our academic expertise."

This move towards a knowledge economy will do plenty to reverse the industrial decline that has beset the region for decades. Worth a projected £3 billion to the regional economy, this regeneration of the Llandarcy oil refinery has combined housing, employment and community building. It will create a vibrant corner of south Wales that should act as a model for the future regeneration of other large brownfield sites.

Photography by Neil Perry (Swansea University Campus image)



WITH BENEFITS RANGING FROM FAST CONSTRUCTION TO COST EFFECTIVENESS, IS PREFABRICATION THE FUTURE OF HOUSING?

“YOU ONLY NEED TO CHANGE A FEW INGREDIENTS IN A TOWNSCAPE TO CREATE MEANINGFUL VARIETY”

– BEN PENTREATH, ARCHITECTURAL DESIGNER



In his essay for think tank Policy Exchange, *Can Beautiful Homes be Built in a Factory?*, the classical architect Francis Terry dismisses the ideas that beauty and factory fabrication are incompatible. “Traditionalists should have no fear because prefabrication has been with us since classical times,” says Terry. “There is evidence that the Romans had standard column sizes, which were used extensively. But a more critical question is, ‘Can these prefabricated houses be beautiful?’ Beautiful cars, furniture and clothes are made in factories, so why not houses?”

The question is clearly a timely one. Mark Farmer is the author of a well-considered report for the Construction Leadership Council called *Modernise or Die*, published in 2016, in which he makes an impassioned plea for the use of prefabrication in the construction industry. Farmer says that his recommendations are even more apposite in light of Brexit. “We have fewer people with the right skills, in the right roles, being deployed in the right way.”

There is a sense that the construction industry itself is at an impasse, slowly losing ground to the sophisticated and responsive industry seen in other

parts of Europe. Paul Tully is co-founder and director of Cube Haus, a developer of modular housing in the UK. “The UK building construction industry is built upon a very old-fashioned business model and within that there’s cost issues where everyone takes a little bit as they go along the supply chain. Everything becomes fairly expensive. In other European countries they take more of a well-managed approach where housing can be delivered quickly and on time,” he says.

The idea of homes made in factories to exacting standards has long been a dream. And it is now becoming a reality. Berkeley Homes have built an off-site modular housing factory, as have financial services company Legal & General. “Prefabrication is without a doubt the future of housing,” says Tully. The evidence seems compelling – there are simply too many benefits, not least dealing with skills shortages. The workers who are employed in the safer and more comfortable factory won’t need to spend time travelling to different sites. It will also increase the standard of the actual build given that quality control is easier to conduct in a factory rather than on remote building sites. The sustainability gains are also clear.

The question is not so much if modular housing will happen, but how will it happen and who will do it.

Architectural designer Ben Pentreath believes that the shift to factory production is not incompatible with his belief in traditional housing. “We currently build houses slowly in a cold and wet environment, susceptible to error and wastage. Given a choice between that or building a house quickly in factory-controlled conditions and then delivered to a site for assembly – well, there’s a great logic to the latter,” he says. “There will still be a place for craft in the building industry, but it shifts to very special one-off buildings or elements that make a place distinctive, rather than the ‘background’ houses – or what we might call the ‘good ordinary.’”

Those who fear that factory production will make houses that lack craft or flair, should not be overly troubled, agrees Terry. “The use of repeated elements makes the building process more efficient because it eliminates one-off items which are time consuming and costly to produce. There is a worry that even if beautiful Georgian-style buildings could be made in a factory this would not be desirable as they would all be

the same and none of the houses would have any individuality. I do not see this as a problem,” he says.

Traditional architecture is no stranger to the idea of repeating modules. Architect George Saumarez Smith puts it thus: “Repetition is not necessarily a bad thing, as long as the module is well tuned to being repeated. Many house types used by volume housebuilders do not lend themselves to repetition, resulting in chaotic and visually incoherent building groups.” Pentreath has been working with The Prince’s Foundation on a town building system that is a conceptual method for moving quickly from large, complex masterplans to detailed planning applications based on a series of types, from house types to elements such as windows.

“You only need to change a few of the ingredients in a townscape to create meaningful variety,” says Pentreath. “This is not the slow, organic approach that created our beautiful villages or oldest towns, but it is the system by which the suburbs of towns and cities expanded rapidly in the 18th and 19th centuries – with superb architectural results,” he says. Far from being a hindrance in creating beauty, prefabrication may well be an enabler.

Above: Adaptation of architectural façade illustrations by Ben Pentreath



HOW ECOLOGICALLY  
SOUND HOUSING  
PROJECTS ARE ENABLING  
WILDLIFE AND HUMANS  
TO COEXIST IN HARMONY

# LIVING WITH NATURE

With the UK facing an acute need for new housing, the pressure is on to find suitable land on which to build. And while developing brownfield sites is inevitably preferable to green, there exists a perception that building in our fields will reduce biodiversity and harm the environment. Yet sensitive development can do plenty to enhance the biodiversity of our landscapes while also delivering housing with a value that extends far beyond the financial.

Across the country a number of projects are championing sustainability through environmentally sound practices that, it is hoped, can influence other developers to follow suit. In Cornwall, the Nansledan extension to the town of Newquay – overseen by The Prince’s Foundation – has pioneered a number of schemes that, according to lead architect Hugh Petter, will enrich the ecology of what was previously poor-quality agricultural land. “We’ve promoted edible urban planting, so a lot of the front gardens have herbs and berries and most of the trees are fruit or nut trees,” he says. “Nansledan also features bricks made with china clay waste, which house bees to help with pollination, and swift nesting boxes to encourage nesting.”

One of the advisors to The Prince’s Foundation at Nansledan was Stephen Fitt, a volunteer with the RSPB and an expert on swifts. “If designed properly,



Left to right:  
Garden Volunteer,  
John Maunder, at  
Nansledan; china clay  
bricks help bees with  
pollination; a swift  
nesting box built into  
the side of a house;  
the Sustainable Urban  
Drainage System  
(SUDS) at Upton



Left to right:  
Gardeners at Nansledan;  
school children learning  
about permaculture design;  
a local pet dog enjoying  
the great outdoors



# “A WELL-DESIGNED URBAN ECOSYSTEM WILL BE MORE DIVERSE THAN AGRICULTURAL LAND”

— STEPHEN FITT, RSPB VOLUNTEER AND SWIFT EXPERT

new developments can be very biodiverse,” he says. “Obviously the ecology of the site will change, but a well-designed urban ecosystem will be more diverse than agricultural land.” According to Fitt, swift nesting boxes – which have been built into the walls of homes and buildings in Nansledan – are an effective way to introduce wildlife to urban areas. “Swift boxes emulate the cavities found in older buildings and will also be used by sparrows, starlings, blue and great tits, and assorted invertebrates,” he says. Having witnessed sparrows and swifts starting to use these boxes in Cornwall, Fitt is now working with the British Standards Authority to produce a standardised swift box design, which he hopes will be implemented by more local authorities in future.

Another concept picking up momentum is that of Sustainable Urban Drainage Systems, or SUDS. Coming in the form of ponds, ditches and waterways, SUDS are a natural approach to drainage that, by adding green corridors through urban developments, reduces the risk of flash flooding associated with conventional systems and can also encourage wildlife to prosper. At Upton, a settlement of about 1,200 new homes in Northamptonshire, ditches run throughout the development with roads and green spaces on either side – with significant results. “It’s probably one of the best examples of a roof-to-river SUDS system in a new housing development that I know of,” says Dr Janet Jackson, Senior Lecturer in Environmental Ecology and Management at the University of Northampton. “Wildlife has moved in quickly and includes beetles, dragonflies, grass snakes and snipes.”

According to Jackson, space on new developments is a major constraint but if – as with Upton – there is room for the waterways to do their jobs and SUDS are designed with adequate contouring and shorelines, wetlands will develop, providing a biodiverse new habitat. “It’s about allowing space for nature,” says Jackson, who has also played an advisory role in

greening Northampton University’s new campus. “If you create opportunities for wildlife, plant native species and include wetlands as part of a SUDS system, wildlife will take that opportunity.”

As well as SUDS’ ecological impact, Euan Hall, the Chief Executive of The Land Trust, a charitable organisation that manages the SUDS at Upton, claims that the resulting addition of green space within urban settlements can also foster a sense of belonging among residents. “We saw the opportunity to use green space as a medium to help build communities,” says Hall. “Our model is about managing land and engaging with the community, whether that’s through getting kids involved in forest schools or organising fêtes.”

The positive effects of living in close proximity to nature is well-documented. Edward O. Wilson’s 1984 *Biophilia* – suggesting that humans possess an innate tendency to seek connections with nature – has been the subject of many subsequent studies linking health and wellness, both physical and mental, with natural surroundings. It also forms the major thrust of HRH The Prince of Wales’ 2010 book *Harmony: A New Way of Looking at Our World*, which provides a blueprint for a more balanced, sustainable world and asserts that people can live in harmony with nature – an ideal increasingly being adopted by forward-thinking developers.

The findings of The Land Trust’s 2015 independent Perceptions Survey and Social Value Study bear out this idea with nine out of 10 residents citing green space as having a positive impact on their mental health and more than 75 per cent feeling that it brings their community closer together. These are points that Hall says add additional human value to a developers’ bottom line. “Green space used to be what was left over at the end of planning a development,” says Hall. “But if you create a fantastic environment for your properties you can sell them more easily and for more money, too.”

Photography by John Hersey, Courtesy of Green&Blue



# CALL TO ACTION



## 1

### CONTROLLING LAND, CAPTURING VALUE

Although The Prince's Foundation has achieved much, the political drive to build more homes, combined with NIMBYism means that monocultural housing estates are still being built on the edge of our towns and villages. The facilities that should be accompanying these new developments are often still holes in the ground. It is clear that for more areas there is more than enough money to be made by building well, whilst still delivering schools, community centres and other necessary provisions, including a fair proportion of affordable homes. How do we do this? By putting design controls and vetting processes into place early before the land value has been drained, and by following the precepts suggested here.

## RESOURCES

DOWNLOAD A COPY OF HOUSING  
BRITAIN FROM THE PRINCE'S  
FOUNDATION WEBSITE

[www.princes-foundation.org/resources](http://www.princes-foundation.org/resources)

It is well recognised that taxing land is a complex issue which can produce unintended consequences. That said, unless we find practical ways to incentivise landowners to build better quality places then we will always struggle to create the value for the right level of affordable housing and community infrastructure. Working with landowners at an early stage when strategic development plans are being drawn up, and prioritising those who will commit to higher quality placemaking, is critical both before a housing allocation and outline planning consent are granted. Insisting on quality at detailed planning stage is always too late.

## 2

### MAKING PUBLIC SPACES AND PLACES

In order to create communities, we need to pay as much attention to the public spaces in-between buildings as the buildings themselves. Fields of individual detached houses rarely achieve this, and so more paired or terraced housing should be used. Combined with well-designed and strong boundary treatments, such housing not only creates a sense of place but enhances the natural security of the urban block, clearly defining the public and private realms. Developers should recognise that well-designed public spaces add value to a place as a whole. With more and more people renting properties, the long-term management of public space requires closer consideration.

## 3

### BLENDING BUSINESS WITH HOUSING

We must try to integrate homes and workplaces in order to make communities more sustainable. Every neighbourhood over 1 kilometre in diameter should contain small, medium and large-sized employment spaces within it. Large plots that will generate significant traffic should be on the edge of neighbourhoods, but small employment spaces with flats or maisonettes above should be distributed at local centres and along main movement routes to allow start-up businesses to flourish. These businesses are vital for enhancing social vibrancy, economic activity and creating a more interesting place and should be supported with the offer of low rates and rents.

## 4

### DESIGNING STREETS FOR PEOPLE NOT JUST CARS

Design streets to incorporate both vehicle and pedestrian movement. Within a new settlement, we should design new roads to be pleasant places to walk along. To ensure that roads are not dominated by cars, highway authorities should work with traffic engineers and urban designers at an early stage. A simple rule of thumb is to create an 'event' (a public space or change in building line) every 60-80 metres to discourage speeds getting above 20 mph. If this can be achieved then building setbacks and trees are less of an issue as reduced speeds mean that the site lines and visibility splays will be less. The Manual for Streets is a design tool which is very helpful in this regard.

## 5

### MAKING POPULAR AND BEAUTIFUL BUILDINGS

Local communities will tell you what they like most about their place if you ask them. We should ensure though that collaborative design exercises are run with the help of local builders and architects to develop building designs and types. These can then be collated into a pattern book or housing manual with proportions drawn and suitable local building materials and details specified. In many cases there is a 'dumbing down' of details between detailed planning consent and construction so it is essential to sign off outline specifications and standard details at an early stage in order to hold developers to them. The BIMBY (Beauty-In-My-Back-Yard; bimby.org.uk) housing toolkit sets out a clear process for doing this.

## 6

### ENABLING LONG-TERM STEWARDSHIP

The landowner is the most influential player in the development process as they are ultimately in control of what happens on their land until they sign that control away to agents or developers. We should incentivise landowners to choose sympathetic developers and builders who can construct what local people want. Setting up development vehicles that give landowners ongoing control in the development can be a way to encourage a community legacy not just for current landowners but also the next generation. This model is also relevant for public sector land which could be used to provide exemplar development models.





# 7

## DIVERSIFYING THE HOUSING MARKET

Most housing in Britain is delivered by a small number of volume housebuilders who are encouraged to deliver large numbers of houses to a relatively small sector of society. We also need small to medium-sized developers, as well as different housing investors, to deliver diverse mixed-use communities. Multiple markets must also be targeted, so it is essential at the start of the development process to understand what types of housing the area may support and seek investors and developers to work together under a coherent masterplan and set of design codes. Incentives are needed early in the planning process to allow small builders access to development opportunities.

# 8

## GETTING THE BEST FROM BIG BUILDERS

Large housebuilders like certainty through the planning process and enough repetition in building types to create beneficial supply chains and competitive prices. However, if no quality controls are set at the housing allocation stage, larger housebuilders will aggressively compete with each other on price for land and by default the builder who can build cheapest will win. We need to acknowledge that this drives down quality and more often than not leaves little value left for community infrastructure. Greater controls on build quality should be given early on to suit volume builders and give them the certainty to build well. This can be worked into their financial equations and land bids.

# 9

## BREATHING LIFE INTO HERITAGE BUILDINGS

Historic buildings that have lost their existing purpose are often left to decay so we need to find creative re-purposing of uses and spaces to create value and save the buildings. It is difficult to put a financial value on history and memory but they are hugely important to communities. We have found that by working closely with local communities, when developing plans for saving old buildings, it is useful to get a sense of which elements are important to people in order to unlock a creative solution. Strong local partnerships between investors and end users are also key and an integrated design process, such as Enquiry by Design, is a good way of bringing the various players together to brainstorm.

# 10

## THE RISE OF THE MANSION BLOCK

In areas of high land values and pressure to densify, such as city centres, landowners and developers often choose high-rises. However, we believe that high-rise buildings in cities like London rarely make good contributions to public spaces at street level, nor the skyline itself. Some of the most attractive, places in London are made up of mid-rise mansion blocks. Frustratingly these have become illegal to build due to new building regulations. Therefore more work is needed to change the existing regulations and find creative solutions for mixed-use mansion blocks. They are ideally suited to hosting a wide range of unit types, making them highly flexible in a rapidly changing world.

# 11

## SOCIAL HOUSING AND THE CITY FABRIC

Regenerating post-war social housing blocks is challenging because they involve multiple landowners and landlords. We must ensure that the first step in any potential estate regeneration project is through public engagement with residents to see what proportion want their estate redeveloped and most importantly how many people would want to remain on completion. Existing residents must be given the right to remain but are also rehoused in similar quality housing. Many housing estates are relatively low density so it is possible to increase densities in order to help pay for the rebuilding, whilst knitting the street layout back into the surrounding streetscape.

# 12

## REMEDIATING BROWNFIELD LAND

There is enough brownfield land out there to meet a high proportion of the regional housing targets. We have to be honest though and admit that it is often more challenging building there than on greenfield. What often inhibits brownfield development is the element of risk and so we have to enable close working relationships between public and private sectors to develop practical long-term visions. In many of these projects an ideal end-user does not yet exist and so involving local stakeholders in visioning exercises to test multiple outcomes against a flexible framework is vital. Once a masterplan has been created, the site can then be actively marketed to attract a range of end users.

# 13

## COMBINING FAST AND SLOW-TRACK METHODS

We are often told that construction is lagging behind other sectors in terms of adopting new technologies which is undoubtedly true. If homes can be made in safe, dry factory conditions, close to site using low carbon materials and minimising waste then that is surely a good thing. However, there is often a misunderstanding that if homes are made using new off-site methods then they need to look completely different. This is simply not true as history has shown that architecture in one tradition can be built using various methods and different materials over time. Perhaps the core of the building can be built 'fast-track' whereas the façade made using local crafts and materials to give context.

# 14

## ENHANCING WELLBEING WITH NATURE

We believe that access to nature has a positive impact on physical and mental health. However, it is not necessarily true that building houses in green fields will automatically decrease the amount of biodiversity in a place. We believe that with controlled medium-density development, and careful environmental and landscape design, negative impacts of housing on nature can be minimised. We should recognise that creating networks of green corridors through a site is just as important as the amount of green space. Green infrastructure, like Sustainable Urban Drainage Systems (SUDS), can help enhance biodiversity and provide important connections to nature.



# FURTHER READING

## A SELECTION OF ESSENTIAL READING AND RESOURCES

*Brindleyplace, Birmingham: Creating an Inner City Mixed-Use Development in Times of Recession*  
by Andrew Coulson & Geoff Wright

*Building A Legacy: A Landowner's Guide to Popular Development*  
The Prince's Foundation, 2017

*Celebrating Poundbury Magazine 2015-2016*

*Estate Regeneration: Six Steps to Success*  
The Prince's Foundation for Building Community and The Hyde Group

*Fixing Our Broken Housing Market*  
The Department for Communities and Local Government, February 2017

*Garden Communities*  
The Ministry of Housing, Communities and Local Government, August 2018

*Home Types Surveys*  
Ipsos MORI Social Research Institute

*Housing Communities: What People Want*  
housing-communities.org  
The Prince's Foundation, 2014

*Housing London: A Mid-rise Solution*  
The Prince's Foundation, 2014

*Independent Review of Build Out Final Report*  
Rt Hon Sir Oliver Letwin MP

*Manual for Streets*  
The Department for Transport, 2007

*National Planning Policy Framework*  
The Secretary of State for Ministry of Housing, Communities and Local Government by Command of Her Majesty, July 2018

*Old Becomes New*  
Kit Martin, November 2017

*Outrage: The Architectural Review*  
Ian Nairn, June 1955

*Places, Streets and Movement: A Companion Guide to Design Bulletin 32*  
Department of the Environment, Transport and the Regions  
London, September 1998

*Planning Practice & Research Journal*  
tandfonline.com, Volume 33, 2018

*Poundbury Factsheet*  
Duchy of Cornwall

*Poundbury Economic Impact Assessment for The Duchy of Cornwall*  
Anne Gray, Policy and Research Dorset County Council, June 2018

*Shelter Briefing: Building More Affordable Homes*  
shelter.org.uk

*Sustrans: Delivering Liveable Neighbourhoods in Your Borough*  
sustrans.org.uk, June 2018

*The Prince's Foundation*  
www.theprincesfoundation.org

## THE PRINCE'S FOUNDATION

President  
HRH THE PRINCE OF WALES

Chief Executive Officer  
MICHAEL FAWCETT

Deputy Chief Executive  
KENNETH DUNSMUIR

Executive Director  
EMILY CHERRINGTON

Senior Director  
BEN BOLGAR

## EDITORIAL TEAM

Editor  
HELEN JENNINGS

Art Director  
JOEL BAILEY

Associate Editor  
TIM ABRAHAM

Designers  
JOSH BRISTOW  
EMMA KALKHOVEN

Sub Editor  
LIZZIE BARRON

Writers  
JOE LLOYD  
LAURA MARK  
JAMES MACLACHLAN  
COLIN MARRS  
BEN OLSEN  
DEBIKA RAY

Photographers  
HUGO BURNAND  
ANDY DONOHUE  
SARAH FERRY  
STEVEN GALLAGHER  
CHLOE GRAYSON  
INDIA HOBSON  
JAMIE MURRAY  
JOHN HERSEY  
LARA JANE THORPEN

Stylist  
JO BAILEY

Illustrators  
BEN PENTREATH  
TIM CROCKER  
LÉON KRIER  
GEORGE SAUMAREZ SMITH



Housing Britain is published for The Prince's Foundation by 3CC LLP 58-60 Stamford St London SE1 9LX  
Tel: +44 (0)20 7921 9019  
Fax: +44 (0)20 7921 9145  
www.3cc.london



Colour reproduction by Zebra. Printed by Stephens & George. The promoter is The Prince's Foundation unless otherwise stated. ©2019 3CC LLP. All rights reserved and reproduction of any part of this publication is not allowed without written permission. Views expressed in the publication are not necessarily those of 3CC LLP.



# RESOURCES

DOWNLOAD A COPY OF HOUSING BRITAIN FROM THE PRINCE'S FOUNDATION WEBSITE

www.princes-foundation.org/resources

