Introduction

In December 2011, the Department of Communities and Local Government (CLG) released a study detailing a new trend in planning towards "lifetime neighbourhoods" as a response to the demographic shift taking place towards an increasingly ageing population. The problem identified in the study is that although individual homes are increasingly hospitable to an ageing and otherwise disabled population, the design of our neighbourhoods is a frequent barrier to the maintenance of the independence that we so value not only as we age but throughout our lives. The response detailed by the report is to design neighbourhoods as inclusively as possible not only for ageing, disabled, and impaired populations, but for everyone. It is only by designing these neighbourhoods that we will create communities that provide for individuals throughout their lives. As a consequence, communities will benefit from the active involvement of as many people as possible.

In an effort to identify the most significant elements of a lifetime neighbourhood, the CLG examined attempts by communities around the nation at being more "inclusive" in planning. The results were wide-ranging, but all variables fell into two broad categories: first, the environment of a neighbourhood must not present physical barriers, particularly to disadvantaged groups (e.g. curbs must be marked by textured pavement, businesses must be wheelchair accessible, road crossings must...
be audibly cued, etc.), as well as to the general population. Mobility, in essence, should be as easy and stress-free as possible. Second, a neighbourhood must have as many resources as readily accessible as possible; not only resources for disadvantaged groups, but resources that everyone would find useful (medical centres, schools, businesses, and so on). These services should be as responsive as possible, meaning that residents should not only be influenced by them, but be able to influence them through community engagement and participation in the political process. In short, residents should be empowered. Summarised, the movement for lifetime neighbourhoods is away from the specialised, segregated, top-down planning of the past and towards a bottom-up, integrated, and diverse planning intended to create mixed, interdependent communities that are as accommodating to residents as possible.

As a leading campaigner for Lifetime Homes, Habinteg Housing Association has set out to find an existing example of a Lifetime Neighbourhood in order to highlight the design elements of such a development and to demonstrate the usefulness of such design. Whilst it is relatively common to find pre-existing neighbourhoods that are making attempts to move towards more inclusive design, as covered by the CLG paper, it is more difficult, however, to find more completely integrated lifetime neighbourhoods. This is because the shift in planning is recent, and the broad partnerships needed to develop these communities takes time to establish. The east London development of Barking Riverside is an excellent example of a lifetime neighbourhood by design and is entering its first stages of completion.

Background

Barking sits at a sharp bend in the River Thames, and was initially a large fishing community that moved into ship-building in the late 1800's. As London became more and more industrialized, the area's role as a maritime centre became secondary to its centrality in manufacturing, culminating in the drainage of Dagenham Marsh and its subsequent conversion to industrial space. The coal fired Barking Power Station was constructed in the 1920's, and cemented the area's identity as predominantly industrial. Since deindustrialisation hit the capital in the 1970's and 80's, Barking, like many neighbourhoods in east London, has suffered from increasing levels of unemployment, disenfranchisement, and general economic downturn.
In 2004, Barking Riverside, Ltd. was formed to sustainably develop the brownfields along the Barking riverfront into a new mixed use development formed around mixed density residential space. After a number of years through the planning and consultation process, work on this lifetime neighbourhood began in August of 2010. The first community centre opened in September of 2011, and the first residents moved into their homes in January of 2012. Construction is scheduled to continue until 2025, by which time Barking Riverside will be composed of over 10,000 homes and will count 25,000 people as residents, with easy access to public transportation as well as public, commercial, and green space designed to be as engaging and accessible as possible.

Design and Planning

The defining design ethos behind Barking Riverside is one of permeability, connectivity, and inclusivity, in order to create a space that people will enjoy living in. The first step taken in the design of the development to fulfill this ethos is the equal availability for all residents of shared space at multiple levels. At the smallest scale, homes are clustered overlooking communal courtyards, ensuring that each residence is within easy viewing and walking distance of public areas. As scale increases, more and more shared space becomes available in the form of parks, sports facilities and community and business centres.

The design for how these spaces are reached is also exemplary, because in order to achieve equality of access for mobility impaired people, the architects of Barking Riverside have attempted to desegregate transportation.

This means that, for example, where stairs allow pedestrians access to another level, instead of the traditional strategy of devising an alternate route for wheelchair users that can often be quite out of the way, the designers have installed ramps directly adjacent to the stairs. Though this comes at some spatial cost, it allows wheelchair users and everyone else with wheels (e.g. buggies, shopping trolleys, etc.) to use the same route as their pedestrian neighbours, encouraging the sense of solidarity and community that the architects are striving for.

Another powerful example of the desegregation of transportation designed into Barking Riverside is the implementation of living streets, roads whose
pavement has been leveled to the surface of the asphalt and across which pedestrians have free access, thus mixing foot traffic with vehicular traffic. This encourages more interaction between pedestrians and motorists, slowing traffic and creating a more permeable and interactive environment. To further encourage the integration of disparate populations, socially rented and privately owned homes are also intermixed on a house-by-house basis, ensuring that owned and rented homes exist on a neighbourly basis.

A final example of the permeable and social nature of the development is the low fencing installed in the back yards of Barking Riverside homes, ensuring that, when spending time in their rear gardens, residents can see across into the rear gardens of their neighbours. This stands in stark contrast to the usual design of such space, and is further representative of the open ethos of design that the architectural team followed at Barking Riverside.

**Key Features**

**Mixed Use**: One of the most significant goals laid out by the developers of Barking Riverside is that everyone will live in close proximity to the education, health care, shops, sports, leisure, and playing facilities that they desire. According to the CLG research, mixed use planning is one of the most common elements of a lifetime neighbourhood, because it ensures that residents need not leave the neighbourhood to meet their needs. To meet the design criteria for mixed use, Barking Riverside has incorporated four neighbourhood centres that will house not only extensive commercial facilities, but also three schools, multiple healthcare centres, as well as extensive park space, all of which is designed to be easily accessible by all residents.

**Close Availability of Services**: Just as important as the mixed nature of space at Barking Riverside is the proximity to services that residents of the development will enjoy. Particularly significant to individuals with mobility problems, services at Barking Riverside are designed to be as close to residential space as possible. The nearest resource for all residents are the large public open spaces within walking distance of every home. The next level of services available to residents are the four service centres, also within walking distance for most but well connected to public transportation. Additionally, Barking Riverside is not a gated community, but is in fact designed to be porous to communities surrounding it and to greater London, ensuring that residents also have easy access to resources outside of the development.

"The early completion of the Rivergate Centre means that important community facilities are in place before the housing, a key feature of the development."

- Mark Taylor, Media and PR Officer, London Borough of Barking and Dagenham
Pedestrian Focus: Another key element of Barking Riverside’s inclusiveness by design is the pedestrian focus of the development; impressively, Barking Riverside is laid out in such a way that a walk from any point in the development to any other point will be a safe, pleasant and efficient journey for everyone. Within the development, safe and accessible pedestrian transportation will grant the freedom and independence that is denied to so many groups in an environment dominated by vehicles. Although this is particularly beneficial for disabled people, the pedestrian-oriented focus on transportation planning within Barking Riverside will help everyone to create a more active and personable communal space.

Sustainable Development: As a new development, Barking Riverside is being built on the cutting edge of sustainable living. Not only are the individual buildings being built to a sustainable standard during construction and to encourage a sustainable lifestyle, but the entire development is designed to encourage the residents' integration with the privilege and environmental responsibility that comes with life along a recovering bank of Thames wetlands. The development is built to showcase its riverside nature, with river, wetland, and wooded views throughout the development’s walks, all of which are designed to protect the fragile environment as well as showcase its beauty.

Development and Building

Of the 10,800 homes that the development proposes to contribute to the London housing market over the next 20 years, the first were completed in January 2012 and now house residents. When completed, Stage 1 of the Barking Riverside construction plan will consist of:

- 1,450 dwellings
- 40% affordable housing
- 45% three or more bedrooms
- 10% wheelchair accessible
- 100% built to Lifetime Homes standards
- 144,000 m² residential space
- 232,000 m² public open space
- 760 m² retail space
- 200 m² medical facilities
- 15,000 m² school and community centre

“One of the things that drew me to the development was how family-friendly it seemed, like it will be the kind of place where you would want to raise a child.”

- Barking Riverside Resident
Stakeholder Views

Residents: Residents of Barking Riverside, though newly integrated into the development, are largely positive about their experiences so far, and are excited for the future. Among them, the two primary motivations for selecting a home at Barking Riverside were based in economics and design, because the layout of the development is very attractive to people who want permeability in their community (mobility impaired people, those wishing to start families, etc.), and the London location makes the development well-priced.

Architects: The architects of the project are very fond of Barking Riverside, because for them, it is an opportunity to practice ethical design without the constraints usually placed on such architecture. They are able to pursue the goals of permeability, connectivity, and inclusivity that they share with the developers in a relatively unfettered environment, allowing them to design a community that, they hope, will meet the needs of a diverse and ageing population, encouraging individuals to stay in the community as their needs change.

"The nice thing about working on something like Barking Riverside is that, we learn a lot about good design principles during our education, things like inclusivity and equality in design, but here's a chance for us to put them into practice."

- Michael Swiszczowski
Architect, Sheppard Robson

Conclusion

Barking Riverside is an excellent example of a developing site that is following the ethos of lifetime neighbourhoods, by anticipating the changing needs of their residents as an increasingly ageing population. The planners of Barking Riverside have set a precedent for residential developments in the coming years that will serve as a benchmark for other communities in the UK. Not only is Barking Riverside designed to be equally inclusive of as many groups as possible, being very mindful to meet the requirements of multiple special needs groups, but it is also designed to accommodate the shift of existing populations through membership in these groups as their requirements change. They have created a neighbourhood that individuals and families of a variety of backgrounds and needs can make use of for years to come, in an environment that is safe, welcoming and sustainable.