

# Women and viable housing environments

**A. Thorne**

Anne Thorne Architects Partnership  
110 Elmore Street London N1 3AH e-mail: [anne@annethornearchitects.co.uk](mailto:anne@annethornearchitects.co.uk)

**Key words:** Women at home, sustainability, sharing caring, sharing wealth, women's safety

## **Abstract**

Anne Thorne Architects Partnership is a practice established in 1991 our work looks at the production of economic solutions for social housing and for infrastructure, with particular reference to women's lives in their role as carers and in the Public realm. The practice primarily explores the nature of women's lives in London. Recent work includes sustainable new timber frame housing in breathing wall construction and refurbishment of housing where we have reduced fuel bills by 50%. However, experience has taught us resolution of technical issues is secondary to people's perception and experience of home and environs as a place of safety. Women are curtailed by the perception of danger within their environment far more than men even though statistically crime figures show men at higher risk outside the home. This paper explores the importance of housing and its context to women's lives, as carers of the young the elderly, disabled and part time paid workers. These roles remain predominantly with women throughout the world, how does this inhibit women's participation in public life? If women are to participate after work and particularly in the hours of darkness our work on the urban regeneration of a large social housing area in London established the importance of location of facilities such as schools, places for the care of the elderly and their proximity to home. Our work on a green toolkit for the Greater London Authority, considers access to parks and recreation particularly important for the health of the nation as cities become denser. With the designs of towns and cities throughout the world catering for growing housing need how can this be incorporated to ensure that development empowers low-income families, particularly women headed households that are generally the poorest?

## **1 Introduction**

It remains the case that what different people are doing, when and how, is crucially affected by "who" they are, that is, male or female, young or old, black or white, gay or straight. Our social roles and relationships in the city shape everything from journey patterns to household formation to caring responsibilities. The realm of women in the environment is gradually broadening but even in the richer

countries of the world her involvement is curtailed by: Poverty; Fear of Crime; Caring for children; Caring for the elderly; Caring for the disabled

Using our work in London and in the suburb of North Town as examples we hope to illustrate an approach, which although based in the South East of England will promote ways of thinking about the environment and the issues for women. Our work involves a broad spectrum from the detailed design of houses, nurseries, respite care to undertaking studies for the Greater London Authority on issues such as Supplementary Planning guidance on meeting the needs of London's diverse communities. We are also working on a Green Toolkit for women, which examine issues in public open spaces. Our work has extended to the design of Master plans (note the language) for large sites. But common to all our work is a deep commitment to consultation. Consultation is the first and most important step in not only making sustainable communities but also creating lasting environments in an attempt to minimize the exploitation of the world's resources. The paper starts at home and follows women out into the Public Realm.

## 2 Women at Home

A large part of our work is involved in the provision of homes for low-income families. The critical issues are: Space; Warmth; Water; Crime; Accessibility; Access to gardens or balconies especially for children; Access to transport; Cost.

“Women are more likely to be living in fuel poverty, i.e. unable to heat their homes to the standard they require. Overall eight percent of London householders are in fuel poverty, but women are one and a half times more likely to be in fuel poverty than men.”[1]

### 2.1 Angell Town Estate

We have been working with residents over a five-year period, to develop proposals at Angell Town, Brixton, now transformed by an estate action programme. Boatemah Walk is the third phase of work; new build designed by ATAP, after Holles House and Warwick House, refurbishment projects.



Figure 1: Boatemah walk

#### 2.1.1 Sustainability

The flats were designed with the long-term involvement of residents, both in the overall decision-making and in the detailed design. The refurbishment of the existing flats was an important part of a sustainable approach. We insulated them to high standards including looking at cold bridging issues. The first phase of refurbishment was then independently monitored, including fuel bills, against the second phase, which had not been refurbished. The temperature in the new flats is about one degree

higher than those in the original flats, but the energy consumption for heating in the refurbished flats is about half that of the original flats. This is a significant reduction.

The new flats are constructed of prefabricated timber panels, insulated well above present building regulation standards, with recycled cellulose fibre insulation. The cladding is of timber, ceramic tile and render. The timber achieves 70% Forest Stewardship Council certification, which means the timber comes from sustainable sources. Balconies are designed to maximise solar gain in winter while screening south facing rooms from the sun in summer. Kitchens face north with views over the local park. To maximise day lighting, kitchens and living rooms are divided with glazed double doors. The scheme achieved an 'excellent' Eco-rating under the government 'Ecohomes' scheme.

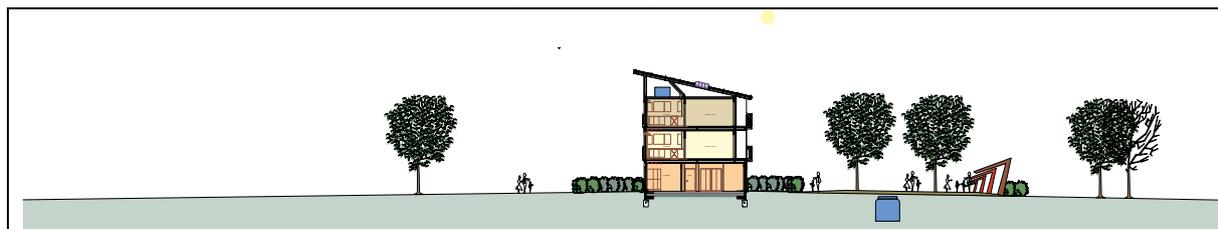


Figure 2: Maximising the potential of a south facing site-designing for sustainability

### 2.1.2 Non toxic materials

A healthier internal environment is the result of using environment friendly paints and finishes and natural linoleum and timber flooring. This should help with health problems, including asthma now a major issue in the U.K. particularly for children.

### 2.1.3 Harvesting rainwater

In Boatemah Walk Rainwater is collected from the metal roof and stored in a large tank beneath the community garden. Grant funding has enabled rainwater to be recycled to flush w.c.s, and low water use fittings have been installed. This can reduce water consumption by a third and will result in reduced water bills to residents. A 15,000-litre tank buried below the garden feeds a header tank located in the stair tower, which is backed up by a mains failsafe supply. No UV or chemical treatment is necessary. The system is expected to save 400m<sup>3</sup> of water a year, with direct savings to water bills.

### 2.1.4 Photo voltaic energy

The scheme is piloting a new photovoltaic roof designed by Solar Century with Corus metal roofing. A thin film is applied to the standing seam aluminium roof, and generates electricity, which is used by the ground floor flats. The thin film photoelectric array is estimated to produce a total output of 13,353kWh/y, compared with average household consumption of 4,200kWh/year. Electricity generated will be monitored. It is a grid-connected system, the local council will sell energy that is not used to the national grid. On the ground floor are three bedroom flats. They are designed with accessibility as a priority, and are fitted with wheelchair accessible kitchens and bathrooms. The hall is spacious and there is room to park and charge up an electric wheelchair. These flats benefit from electricity from the photovoltaic roof.

## **2.2 Home work**

Part time work and home working are an essential part of women's economy, Providing space in the home to enable this, is important and potentially enables men and women to cut down the number of fuel-guzzling journeys to work. However, women are more vulnerable to the isolation of home working and the potential it leaves for exploitation. Domestic Violence is the crime of violence women are most likely to experience. [2] This particularly reinforces the need for community centres where women can go with the people they are caring for and share experiences, problems and resources. 'The employment rate of women in London with children is 53% and that of women outside the capital 65%.' " Almost one- third of London women work part-time, but this is less than outside the capital. Much of this is to do with childcare costs and the time needed to travel to work" [3]

## **3 Sharing caring, sharing wealth**

"Women leave school, college and University with the same level of attainment and achievement as men, but if we are not paid equally then the economy is not using our skills equally. So the pay gap represents the under-utilisation of women's skills." Women in London earn 76% of average full time male hourly earnings. [4] (GLA Capital Women 2003)

9 out of 10 lone parents are women –half of lone parents are on income support for several years. [5]

In building professions women represent 3.4% of the work force. [ 6] (GLA capital women 2003)

The regeneration of areas particularly those qualifying for subsidy, provide an opportunity to benefit women especially if mainstreaming of gender issues is built into the process they can provide women with access to paid employment and new skills. On Angell Town a resident came for work experience and we continued to employ her part time while she did an access course, next year she will complete her first degree in architecture. Another woman, who had previously worked at a supermarket checkout, was trained as an administrator and has gone on to be a full time manager of an office. Each of the consultants took work experience students for varying lengths of time including the engineers and quantity surveyor.

### **3.1 How can we empower women beyond the home?**

Support for carers in London is sporadic and in the suburbs even more so. Providing educational, recreational and social services that meet the needs of young people from all ethnic backgrounds and children with disabilities along with support for voluntary sector/community organizations (including office accommodation) for services and support networking immediately makes a difference. The current UK Surestart initiative aims to provide childcare facilities particularly for poorer families. It targets young mothers enabling them to access training and work. However it can't be emphasized enough how important it is that these facilities are local facilities within 15 minutes walk of home. Wrap around childcare is also particularly important for women who for example work in the National Health Service- 70% of NHS workers are women [8]. Smaller homes currently being built especially by private developers, means it is more difficult to achieve childcare collectively amongst women and their extended families unless there is a place to go such as a Children's centre.

#### **3.1.1 Respite care**

Local government is seeing the benefit of supporting people in their own homes and this has led to the establishment of "life-time" home standards for social housing. The standards allow the future inclusion of a small lift and the ability to put a hoist in between the bathroom. The majority of people experience disability at some point in their life and space standards need to reflect this with at least

minimum wheel chair access to the home and to washing and toilet facilities. But women also need to be supported in the very demanding role as carers this can be done by providing respite for the people they care for from as little as one night to a few weeks. There are two fold benefits; enabling the person with disabilities to get out of the house and refueling carers who are often on call 24 hours a day in circumstances which would not be tolerated in a male dominated work environment. Again if it is to work successfully location is very important.



Figure 3: Coningham Children's centre

### **3.1.2 Transport and accessibility**

The Framework plan (aka Masterplan) for North Town Estate considers the safety of children and the elderly with the new housing creating communal garden "squares" which work with the existing social housing. The majority of existing households are women headed, with a very high proportion of children. In essence it is an out of town ghetto of poverty. To enable women to bridge the poverty gap a crucial element is access to facilities. We have proposed an electric car collective which would be publicly funded initially but paying for its use would maintain the service. Currently buses take the direct route between the estate and the local town where "work" is. The buses also stop at 6.30 pm when "work" finishes. We were told by one woman in a consultation meeting how she had had to walk over a mile with her small children, one very ill, to a pharmacist. She was unable to afford a taxi. (This is in sharp contrast to the neighbouring area, which is statistically one of the richest in the U.K.) No account is taken of the diverse journeys that women make to visit relatives in surrounding area or to go to their children's school or nursery. To enable women to access work they need to be able to slot it into the routine of their lives including, shopping, childcare, care of an elderly relative access to health facilities and training.

## **4 Out and about enabling women to bridge the poverty gap**

### **4.1 What prevents women from specifically participating in the public realm?**

Fear of crime is a large factor in many women's lives throughout the world but often without justification in the Public realm as opposed to the home. 20% of women in London feel very unsafe

when walking alone at night, compared with 5% of men, according to the British Crime Survey [9] In the year ending August 2002 a total of 214 sexual offences, including 54 rapes, by the drivers of illegal minicabs were reported to police in London. [10 ] Post-war planning policy and the build up of vehicular traffic has caused fragmentation of the urban environment and degradation of the built fabric. In looking for ways to improve the pedestrian experience we need to reassess the road system and consider what the implications are for traffic particularly public transport.

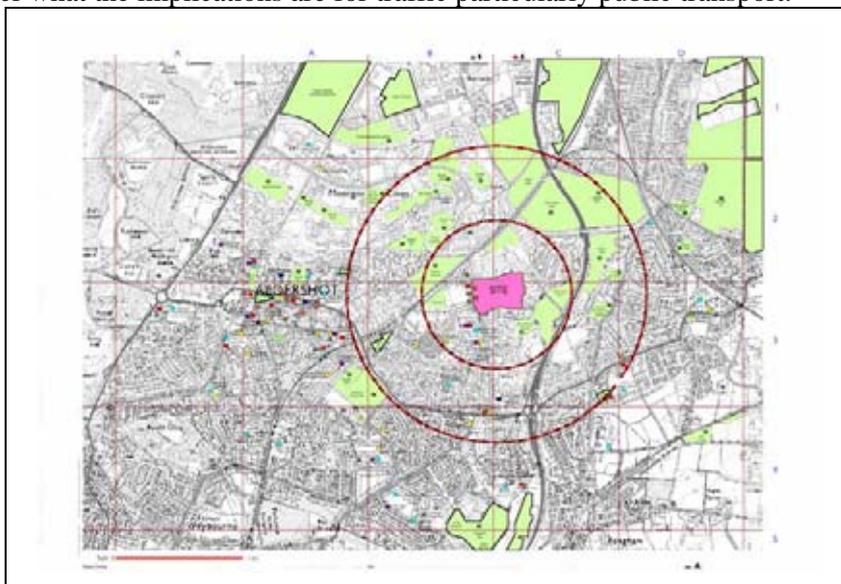


Figure 4: Location of facilities within a 15 minute walking radius North Town

Our work in Aldgate in the centre of London was initiated because the local Guildhall University which has several departments spread around the East end of London, decided to centralize their Library. They were surprised by the protest this brought both from staff and students who were frightened of walking through that part of London especially after dark. Our research showed that the major concern was the unavoidable network of underground pedestrian tunnels, with 28 exits and extraordinarily confusing signage.

Our approach was not only to interview those who were using the pedestrian tunnels but also to go to local community groups and businesses to establish who did not use it. A number of interesting results emerged;

- The survey showed that a majority of women and people from ethnic minorities avoided the underground tunnels, as did the majority of people under 30.
- Those who are agile and unencumbered by shopping or children leapt over the barriers.

Crime statistics obtained from the police showed low crime rates in the area and particularly low in the subways themselves. By working with local people the proposals aim to restore a balance, which was skewed against pedestrians in favour of maintaining vehicular flow through the city. The pedestrian journey was unnecessarily lengthy and inconvenient as a result of this over-prioritisation of traffic.

Integral to the new scheme was a review of bus priority routes, and 'safe' routes and advanced stops for cyclists. Wherever possible tunnels were closed and aboveground crossings installed. Some tunnels had to be kept, however, because they provided access to the station and an underground shopping centre. By installing artworks and clear signage in the tunnels, which had to be kept, the perception of the space was greatly improved. We also added shops where possible to increase the legitimate overlooking of spaces and improve 'natural' surveillance. The area is one where there are many people of different races and religions with different mother tongue languages so we attempted to keep the signage visual referring to red, yellow and blue areas and picking up themes about particular areas. For example the red area refers to the sport centre, which is a local landmark but also explains games

in Somali Chinese Bengali and English within the artwork. A competition was held to involve local artists and we worked with people from these backgrounds who in turn worked with local communities. Monitoring research showed that the number of people accessing the shops from the tunnels went up at completion of the project.



Figure 5: Red Zone pedestrian tunnel

## 5 Going home the end of the day

When work is finished, paid and unpaid, there has to be time for relaxation, at the least an outing to open space with the children. Access to parks and open spaces is an area that we are currently looking at in some depth for the Greater London Authority working with Women's Design Service. The issues are similar to those encountered in the pedestrian tunnels:

Good light levels after dark both within the park and surrounding streets.

Paths based on the routes that people use not on arbitrary design criteria. Often the park can only be used if it is a small diversion from the routine so a variety of pathways leading out of the park with public transport between and linking parks – women's lack of time and lack of access to private transport makes this essential. But in the park women want open spaces and sensitive planting of bushes trees and shrubs to improve visibility and personal safety. Design which considers women's role not just as mothers but also as members of the public so for example a place to exercise, read a book relax without being hassled by men. Park keepers assigned to each park all day to patrol and keep an eye out for trouble. For women who are in the park with their children, they want comfortable weather proof seating near play areas so that you can see the children but not be in their space.

The park next to Angell Town used to be considered unsafe by residents in the housing. There were two reasons for this; to reach their flats women had to walk across the park to the front door from the bus stop this made them feel vulnerable to people who were watching them and potentially tracking their journey home. A series of resident consultations, plus liaison with all interested parties, led to the development of a 2m strip of the adjacent green space planted with a line of pleached lime trees. These provide a degree of separation between public and community space. The trees provide an aerial screen between the park and the patios, but do not restrict views into the green space by other flats. They are under planted with a hedge of holly designed to limit opportunist access to the access path, and very low ground cover plants for the safety of those using the park.

- The planting also protects resident from the very busy Brixton Road: providing a filter for dust laden air blown towards the buildings on the prevailing SW winds from Brixton Road

- a linear ecological resource - the potential for safe nesting in the hedge and foraging in the groundcover for song birds, and provision of nectar for butterflies.



Figure 6: Landscaping across the park to the refurbished Angell Town flats with pleached limes

## 5.1 Safe at home

When we started work on Angell Town security was a major problem; the estate had been designed with narrow passages between blocks, blank gable walls, blind corners and ill lit recesses in passages and staircases. Like the Aldgate project, the priority was cars – but less than 60% of women in London have driving licenses and women are more likely than men to use buses and walk as their main means of transport [11]. The ground floor of the housing blocks consisted of garages and people had to walk up to the second floor of the flats via a ramp, then along a pedestrian walk way only to come down to their front doors on the first floor via a very unpleasant dark stairway. We asked tenants what they saw as the main problems and also what they liked about the building. It became clear that even though this had not been included in the original Masterplan, carried out prior to our involvement, the individual hidden, dogleg stairs down from the 2<sup>nd</sup> floor walkway to first floor flats were a key safety problem and it was agreed to remove these altogether.

We incorporated the space where the stairways had been, into the flats to make them larger and also put windows from the flats to overlook the pedestrian walkway. We added security doors with an entry system so that only the people who live in the flats could access this semi-private area.



Figure 7: The original dark alleys and stairways at Angell Town

In the new flats in Boatemah Walk, the front door to the first and second floor flats leads to stairs that are shared between four flats only. The aim is that people will get to know each other and create a

sense of community that is self policing The flats have a large balconies; both these and the kitchens overlook the pedestrian route to Peckford Place. This should help to increase safety for pedestrians.

## 5.2 Conclusion

We hope these examples have given some insight into the needs of women. The inter locking of her private, public and semi private world. The responsibility we all hold, men and women alike to enable women to meet their full potential in many different ways but at the same time not forgetting the need to include the caring role which she has historically covered unpaid. Caring which affects all of us since we have all been babies and will all become old or incapacitated in the course of our lives.

## Acknowledgements

The input of all at Anne Thorne Architects and the people we work with is gratefully acknowledged

## Reference

- [1] *London Divided, Income inequality and poverty in the capital.* Mayor of London, November 2002
- [2] Greater London Authority *Gender Equality Scheme* GLA City Hall the Queens Walk London SE12AA ISBN 1 85261 456 0 March 2003
- [3] Murzline Parchment Director of Major Projects and Service Delivery Greater London Authority. *Women in Londons Economy –post conference report* Greater London Authority ISBN 1 85261 742 X May 2005.
- [4] Julie Mellor Chair of the Equal Opportunities Commission *Women in Londons Economy –post conference report* Greater London Authority ISBN 1 85261 742 X May 2005.
- [5] *Women and Men in Britain: Management,* Equal Opportunities Commission, January 2002
- [6] *General Household Survey 2000,* Office for National Statistics
- [7] *Women in Londons Economy –post conference report* Greater London Authority ISBN 1 85261 742 X May 2005.
- [8] *ibid*
- [9] British Crime Survey 2000, Home Office in Regional Trends 36, Office for National Statistics 2002
- [10] *Gender Equality Scheme* Greater London Authority Mol/Mar03/SDD&P/MT/317, March 2003
- [11] Greater London Authority *Gender Equality Scheme* GLA City Hall the Queens Walk London SE12AA ISBN 1 85261 456 0 March 2003