



Cardiff Residential Design Guide



Supplementary Planning Guidance

Approved by Council March 2008



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This Supplementary Planning Guidance was approved by Cardiff Council on 13th March 2008. The guidance outlines design policies for new residential development in Cardiff. It applies to medium to large scale residential development proposals and is particularly relevant for developments that include new sections of adoptable highway and public open space. National guidance on which this document is based includes: The Welsh Assembly Government's TAN 12 (Design) and the Manual for Streets. The document also draws on a number of other sources including the Planning Officers Society for Wales "Model Design Guide for Residential Development". The document supplements advice provided by the City of Cardiff Local Plan, Adopted 1996; the Mid Glamorgan County Structure Plan, Adopted 1989; and the South Glamorgan (Cardiff Area) Replacement Structure Plan 1991 – 2011, Adopted 1997. Appendix A indicates the specific policies in the above plans that this guidance supplements. This guidance should be read in conjunction with other relevant Cardiff Council SPG such as Access Circulation and Parking; Open Space; Public Art etc.

The document is intended to secure the highest standards of design in new residential development by providing the planning authority with a comprehensive structure for managing the design and development process. It also gives the development industry a degree of certainty that the design proposals they are working to are likely to be acceptable in principle.

National Planning guidance supports the achievement of good, sustainable design at every scale of development throughout Wales. It recognises that the quality of development directly affects the social, economic and environmental well being of cities, towns and villages.

National guidance seeks to ensure that design is responsive to the 'climate change' agenda, and the expectation is that energy efficient design can result in distinctive and innovative forms of design, which can also make a significant contribution to community regeneration and improving quality of life.

Local authorities are also required to have due regard to crime and disorder prevention in the exercise of their functions under Section 17 of the Crime and Disorder Act 1998 and consider the issue of accessibility for all including the needs of those with visual and hearing impairments and those with limited mobility, at an early stage in the design process.

Cardiff County Council is committed to supporting these objectives, and this document provides a practical tool to convey the design implications of National Planning Guidance and the Authority's own development framework to anyone proposing medium to large scale residential development in Cardiff.

The document seeks to establish a common design language for residential development in Cardiff, clarifying the fundamental design issues and how to address them by: describing the key objectives of residential design and providing guidance on how they may be achieved; describing the design process which should be followed to adequately address each objective; and, providing case study examples which illustrate how many of the principles have been achieved in recent developments in Cardiff.

National Guidance advises that a 'design statement' should be submitted with all planning applications for development which have design implications, including applications for new buildings. This document therefore also clarifies the issues to be addressed in a design statement for new residential development.

Design is only one consideration when making a decision to approve or refuse an application for planning permission. In addition to addressing the requirements of this guide, development proposals will need to demonstrate compliance with the Development Plan and other material considerations and in some cases be accompanied by a formal Environmental Statement.

The Council placed the Cardiff Unitary Development Plan on deposit in October 2003. However, following introduction of the European SEA (Strategic Environmental Assessment) Directive, in May 2005 the Council resolved, with the agreement of Welsh Assembly Government, to cease preparation of the Cardiff UDP and commence preparation of a Local Development Plan (LDP). Welsh Assembly Government guidance indicates that the deposited UDP may remain a consideration in development control decisions until such time as the LDP is adopted. Appendix A indicates references in the UDP to matters which are the subject of this guidance.

Planning Policy Wales Technical Advice Note (TAN) 12: Design, contains general design guidance and more specific guidance regarding housing design and layout. It spells out the principles of good design and encourages a design process which seeks to address these aims from the outset of a project. The principles of good design are based on an understanding of what makes existing places attractive and sustainable places in which to live. TAN 12 identifies that guidance in relation to housing design should aim to:

- create places with the needs of people in mind, which are distinctive and respect local character;
- promote layouts and design features which encourage community safety and accessibility;
- focus on the quality of the places and living environments for pedestrians rather than the movement and parking of vehicles;
- avoid inflexible planning standards and encourage layouts with reduced road widths;
- promote energy efficiency in new housing;
- secure the most efficient use of land including appropriate densities; and,
- consider and balance potential conflicts between these criteria.

This guide features 11 objectives that encapsulate the objectives of good design and the housing design guidance as set out in TAN 12. It provides some simple guidance on how each objective can be addressed in a typical residential development to achieve high quality, safe and inclusive residential development. The 11 objectives are as follows:

1. Character and Context
2. Compactness
3. Accessibility and Ease of Movement
4. Legibility
5. Continuity and Enclosure
6. Public Realm
7. Variety and Diversity
8. Adaptability
9. Designing Safer Environments
10. Natural Heritage
11. Resource Efficiency

Applicants will be expected to work with the local planning authority and stakeholders to develop a design that addresses these objectives. They should describe how their design achieves each objective in a 'design statement' to be submitted with the planning application. Design appraisal by the local planning authority may involve assessing how well each objective has been met before making a decision whether to support a proposal on design grounds. The best way to meet the requirements of this guide is to develop a clear vision for the site which addresses and integrates each objective. A set of key questions are provided at the end of the objectives section of this guide to assist in the assessment process.

The character and context of an area is created by the locally distinctive patterns and forms of development, landscape, culture and biodiversity. These elements build up over a considerable time and tell a story of the area's history and evolution, as well as creating a "sense of place". Development must reflect and respond to the character of the local area in order to enhance its own character and to reinforce the distinctiveness of place. A character analysis will identify these positive local attributes which should be reflected in the design vision for any development.

Obj 1.1 Create a design vision



- It is essential to develop a clear design vision for the development in order to demonstrate its response to character and context. For example, will it be in keeping with the area or create a positive new identity that complements the existing character?
- The design vision must be able to describe what sort of place the development will become and how it relates to its context. This design vision must be set out in the design statement accompanying any development application.
- The most successful aspects of local development identified in the character analysis should be echoed in the design of the proposal. In particular, the development should respond well to context, scale, style, topography, urban grain and historic context.
- The proposal should protect or enhance any site elements which contribute to local character, where they have a long term sustainable future as part of the development.



Fig.1 Barquentine Place: Contemporary approach to Victorian terrace style



Fig.2 Newport Road: Contemporary take on a traditional Cardiff style.

Obj 1.2 Focus on quality and innovation



- Proposals should exhibit a high degree of architectural quality and take advantage of opportunities to improve the character and appearance of the area to further a “sense of place”.
- Within the framework of local characteristics, there is still scope for innovation. Architecture using modern materials and construction techniques can still fit in to local parameters such as street layout, building heights and plot widths.
- In areas where there are few positive characteristics to build on, an innovative design solution creating a distinctive new character may be most appropriate.
- Standard house types should be avoided but if they are to be utilised, designs and layouts should be tailored to suit the site and the wider context.



Fig.4 Steffani Court – Distinctive style that enlivens the street scene.



Fig.3 Velindre Road: High quality contemporary housing with a distinct character.



Fig.5 Maes Yr Anedd: New housing that employs a traditional vernacular and features quality materials and design features, such as the projecting eaves, window detailing and varying ridge tiles.

Obj 1.3 Respect heritage



- The layout and design of developments should be sensitive to the appearance and settings of historic buildings, whether they are Listed, Locally Listed or located within a Conservation Area. Pre-development investigations may be required for sites that have high potential for archaeological remains. See the Council’s Archaeologically Sensitive Areas SPG for more information.



Fig.6 The recent development on the right responds well to the historic buildings on the left.

Undertake a Character Analysis



A character analysis of the site should be undertaken at the outset of the design process. This should both inform the design vision for the development and be set out in the accompanying design statement to any planning application.

Character analysis should involve an understanding of local design characteristics such as:

- Locally distinct patterns of streets and spaces
- Urban grain/built form relationships
- Local or strategic views
- Building envelope : scale, mass, form, height, roof form
- Detailing and visual richness : window profiles, timberwork, entrances, materials
- Layout: Plot widths, set backs
- Topographical, microclimatic and ecological features
- Local patterns of landscape: front garden treatments, street trees

The character analysis should be part of a wider site analysis to include issues such as site constraints, movement issues and historic context. A full checklist of content for site analysis is given in Chapter 3: The Design Process.

Design codes can be a useful way of reinforcing local characteristics such as scale, height, style, materials or colours. A design code is a set of illustrated design rules and requirements for the physical development of a site or area. They normally build upon a design vision, such as a masterplan, and should be informed by a thorough character analysis of the area.

Creating Character: Responding to the wider Cardiff Context



Where the immediate context is limited, consideration should be given to the wider model that the historic development of Cardiff may be able to provide. Whilst the quality of the built environment varies greatly across the City, there are some areas which stand out as exemplars and which potentially could provide a model for future residential areas in Cardiff.

Development from the Victorian to Edwardian periods displays many characteristics found in successful contemporary urban developments in terms of compactness, density, scale, legibility, relationships of streets to spaces, landscaping models, diversity and adaptability.

Case Study: Victorian/Edwardian Cardiff



In looking at the overall qualities of development of this period some key characteristics can be identified, providing an opportunity to develop a new approach to development based upon the successful formulas of the past. These qualities are:

Pattern and Structure

- These areas exhibit a pattern of growth in terms of a hierarchy of streets and spaces. Typically main routes radiate from important centres, with a secondary and tertiary level routes connecting from these and forming a grid network of streets. Within this network, streets open up in places to become areas of green space, ranging from avenues of trees to large areas of parkland within the grid layout.



Fig.7 Rhiwbina Garden Village – Suburban grid layout characterised by distinctive building style, open spaces and grass verges

Block and use

- The use of a block form in development of this period can be seen as assisting permeability and access and improving legibility. The resulting layout provides a framework of compact development and streets with continuity and enclosure, avoiding the need for segregated footpaths. This framework enables a flexible approach to uses which can change over time with mixed use development generally focussed on major intersections.



Fig.8 Hierarchy of streets



Fig.9 Permeable grid pattern of streets

Height and massing

- The hierarchy of streets is reinforced through the built form of development of the period. Taller buildings are found on primary routes, with building scales stepping down in height within each street type within the hierarchy. Height and massing is usually greater in neighbourhood centres where development also tends to be more compact.



Fig.10 Cathedral Road - Building height used to differentiate between primary and secondary streets.



Fig.11 Fair oak Road – The height and mass of this terrace positively frame the junction.

Case Study: Victorian/Edwardian Cardiff



Street widths

- Street widths in these areas traditionally narrow down from primary routes through to secondary routes. Varying widths allow for a variety of public realm treatments which help to reinforce identity and diversity. Wider streets allow for greater provision of on-street parking and street trees to main streets within the structure.

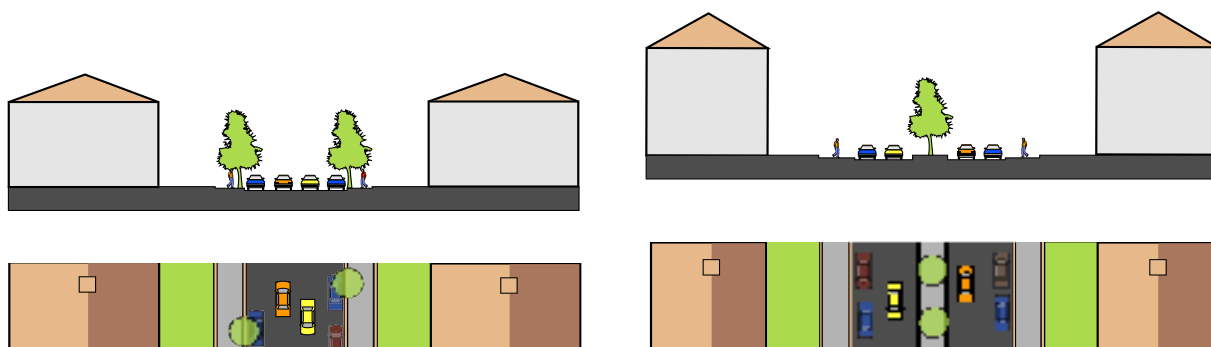


Fig.12 Treatment of varying street widths

Set Back

- The greater dimensions of houses on primary routes is reflected in the size of the set back which reduces through the hierarchy of streets. At neighbourhood centres where uses are mixed there may however be no set back.

Detailed features

- Victorian terraces are typically arranged in terraced blocks with ends punctuated by gable frontages onto the street. There is frequently a standardisation of materials and detailing of treatments to openings, timberwork etc on a block by block level, with some scope for variety at the block level or the very detailed level.
- Materials tended to be of local origin including the use of welsh slate and Pennant stone which references the natural heritage and character of the City.



Fig.13 Ninian Road – Ends of terraces punctuated by gables.



Fig.14 Westville Road – Attractive frontage with distinctive corner feature.

Compact development forms use land efficiently and encourage densities sufficient to support local commercial/community services, amenities and public transport. This in turn enhances the sense of community and reduces the need to travel. The degree of compactness, or density of development, should vary according to the site context. Compact developments should, nonetheless have adequate amenity space, high standards of residential amenity and incorporate servicing suitably.

Obj 2.1 Density



- The density of development should result in an efficient use of land whilst responding sensitively to the scale, form and massing of existing development in the area. Higher densities result in a more efficient use of land but there will be instances where a lower density solution may be most appropriate.
- Higher densities, coupled with additional attention to design detail, can be used to positively define spaces, frontages and main streets.



Fig.15 Regents Place – Medium density development that uses building size to positively define main routes and corners.

Obj 2.2 Amenity and open space



- The provision of useable and appropriate amenity space is required as part of all residential proposals. Different types of residential accommodation may require different forms of amenity space and this will depend on the form of the development (flats vs. houses), the density of the development and the location of the development (suburban vs. city centre).
- For all houses and for ground floor flats that will likely serve as family accommodation, enclosed and secure private rear gardens should be provided. The size of gardens should reflect the character of the area and it must be demonstrated that they are appropriate to the size and type of accommodation proposed. Depending on context, gardens should measure at least 10.5m in depth or 50m² overall. Larger gardens may be necessary where the character of the area or topography dictate. Visual privacy should be provided for at least part of the garden, ideally the space immediately to the rear of the dwelling. Gardens should be large enough to allow for the future addition of modest-sized extensions or conservatories.



Fig.16 Barquentine Place: The scheme illustrates how compact terraced forms around green spaces can be achieved in a contemporary residential development



Fig.17 Plasturton Gardens features a relatively compact form of development but its layout effectively incorporates private amenity and public open space

Obj 2.2 Amenity and open space cont...

- For other forms of accommodation, fully private amenity space can be impractical and alternative provision such as private communal spaces or individual balconies may be appropriate. The form of provision is dependent on the character of the area and privacy considerations. In more suburban locations characterised by larger rear gardens, communal gardens should be provided. Balconies should generally be avoided in these instances as they would be insufficient in size and could result in significant overlooking. In more urban locations, the provision of balconies or communal roof terraces would be more appropriate and in keeping with higher densities. Balconies should be a minimum of 5m² to ensure they are useable.
- Communal spaces should be clearly defined, well-designed, of sufficient size to be useable and inviting, secure and private, accessible to all occupants and integral to the character of the development. The design of these areas should be carefully considered to ensure that all functional requirements of the residents, such as relaxation, clothes drying, refuse storage, etc are met and are designed in such a way to avoid conflicts. For communal gardens, a minimum area of 75m² should be provided for up to 5 units with an additional 10m² for each additional unit.
- Open spaces with a water interest such as water bodies and watercourses add value to the amenity of an area and can contribute to the environmental quality of the surrounding area.



Fig.18 Windsor Quay – Features central area of high-quality open space.



Fig.19 Windsor Quay – Semi-private amenity space for flats and townhouses faces onto the public open space but is defined by hedges and low fencing.



Fig.20 The Monico site, Pantbach Road – Balconies used to provide individual amenity spaces for flats.

Obj 2.3 Residential amenity

- Compact forms of development should still allow for adequate privacy, which must be demonstrated on the rear or otherwise private side of a development and may be achieved through separation distance, screening, orientation and window size and style.

Privacy created by distance



Fig.21

21.00m

Obj 2.3 Residential amenity cont...

- Regard should also be had to building height, separation distance and solar orientation to ensure that proposals do not result in significant overshadowing or have an overbearing impact.
- The aspect of proposed dwellings should be considered to ensure that they face out on to a pleasant street scene rather than a bland parking area.
- A good standard of noise insulation should be provided for more dense forms of development, such as flats, terrace houses and mixed-use schemes.

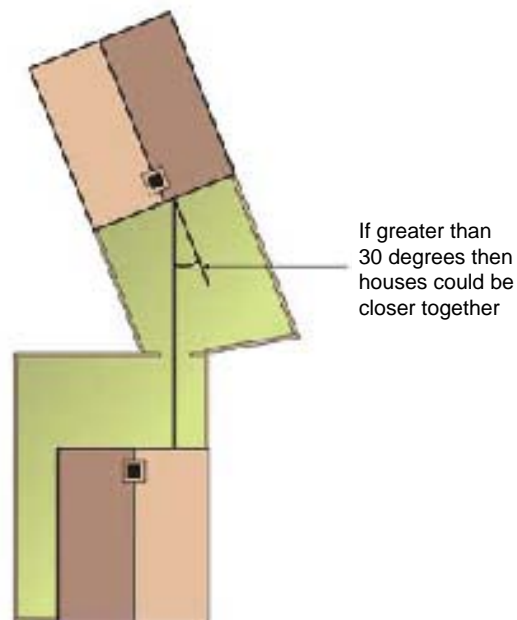


Fig.22

Obj 2.4 Servicing

- Suitable spaces for the storage of rubbish bins, recyclable material containers and compost bins should be provided. Such spaces should be sensitively located, well-screened and easily accessible for both residents and collections crews.
- For individual houses and flats with direct ground floor access, this could normally be provided to the side or rear although provision to the front may be acceptable. For flats with more indirect access, communal spaces of a suitable size are required. Solutions which incorporate storage space within the building reduce the need for free-standing structures and are generally the preferred option.
- The Council's Waste Collection & Storage Facilities SPG provides further guidance regarding the incorporation of recycling facilities within developments.



Fig.23 Allerton Street – Aesthetic rubbish/recycling storage areas and small front patios provided.

Accessibility and ease of movement considerations effectively form the urban structure of a place. They determine how effectively it connects with the existing urban and rural fabric and influence key issues such as the 'walkability' of places, reducing car use, integrating land uses and transport and enhancing the life and vitality of streets and spaces. This section is particularly influenced by the Manual for Streets and TAN 18. The Manual for Streets seeks to better balance the 'place' and 'movement' aspects of streets and defines a 'street' as being a "highway that has important public realm functions beyond the movement of traffic." The Manual also indicates that the design of a scheme should follow a user hierarchy that considers pedestrians and the disabled first, followed by cyclists, public transport users, service vehicles and finally other motor traffic.

Obj 3.1 Permeability

- Proposals should be linked with surrounding developments and existing footpaths, cycle ways and roads effectively. These links should seek to integrate all transport forms and be designed so that they are well overlooked and support the safety of the immediate and surrounding dwellings.
- Clear and easy access to local services and amenities, such as schools, parks, play areas, areas of open space, local employment sites, shops, pubs or cafes should be provided.
- Routes within the site should take account of and allow for future stages of development.

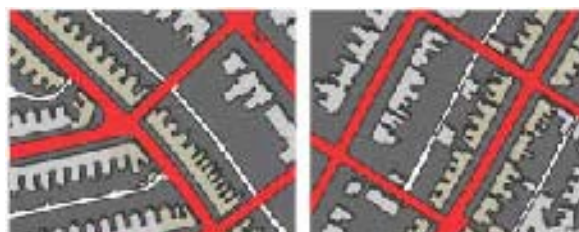


Fig.24 Above Left; Ryder Street, above right Stacey Road, both are examples of accessible layouts that are easy to move around, are hierarchical and work within a deformed grid structure.



Fig.25 Accessibility: permeable grid pattern of streets.



Fig.26 cul-de-sac: circuitous routes between A and B - poor permeability

Obj 3.2 Alternative modes of transport

- Locate proposals near existing transport nodes and encourage alternative modes of transport, such as public transport, cycling and walking by improving local facilities and providing safe, convenient access to them.
- Convenient bus stops and secure and overlooked cycle parking/storage should be incorporated where possible. Particularly large sites should consider the incorporation of a bus route through the development.
- Car-free development and/or the integral use of car clubs for residents of housing in suitable urban areas will be encouraged.

Obj 3.3 Inclusive design



- Inclusive design provides a single solution for all users of buildings and spaces, whereas accessible design often leads to separate facilities for disabled people. An inclusive environment recognises people's differing needs and accommodates them in a way that is universal.
- Equal and convenient access should be provided for all potential residents of the development, including those with visual and hearing impairments, those with limited mobility, the elderly, children and other vulnerable users. Level or gently sloping access should be provided through-out a site and up to building entrances. Furthermore, the needs of disabled people should be taken into account in the design and location of parking spaces.



Fig.27 Stepped access should be avoided in all instances.

Obj 3.4 Passive Speed Reduction



- Building layout and design should take priority over roads, so that highway design and car usage does not dominate the development.
- Reduced traffic speeds should be integral to the development and residential streets should be designed to allow for a maximum speed of 20mph (10mph in home zones) so that streets and spaces are comfortable for pedestrians and cyclists to use.
- Traffic speed should be reduced through passive means (i.e. horizontal deflection), such as pinch points, tree/planting buildouts, on-street parking bays, reduced road widths and staggered junctions, which should be designed to appear as "natural" features of the development and not as overt engineering solutions. Used correctly, these features can encourage drivers to reduce their speeds and drive more cautiously.
- Features such as speed humps (i.e. vertical deflection) and over-engineered solutions are unsightly and should be discouraged. Their use will indicate that the overall design of a scheme is fundamentally flawed and that it has been over-designed to encourage excessive speeds. Furthermore, careful consideration should be given to the use of bollards, as they are often of poor quality and can have a detrimental visual effect on the street scene. Other creative ways of achieving the same effect, such as sculptures, trees and hedges should be investigated first.

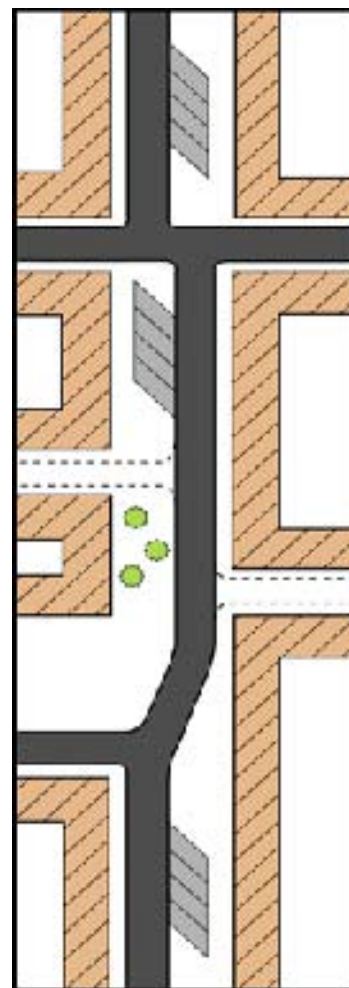


Fig.28 Limited forward visibility encourages lower speeds.

Obj 3.4 Passive Speed Reduction cont...



- Home Zones are streets where people and vehicles share the road space safely and on equal terms. Quality of life takes precedence over ease of traffic movement. Flexible street layouts incorporating homezones (or features thereof) and other traffic calming measures, such as small corner radii, mini-roundabouts, T-junctions, 90° curves, minimising straight stretches of road with extended forward visibility, reduced visibility splays and variations in materials should be incorporated where possible.
- Gateway features and surface changes should be utilised to indicate changes in street priority in accordance with the overall user and street hierarchies of the scheme. Signage and road markings should be carefully considered and only utilised where necessary.

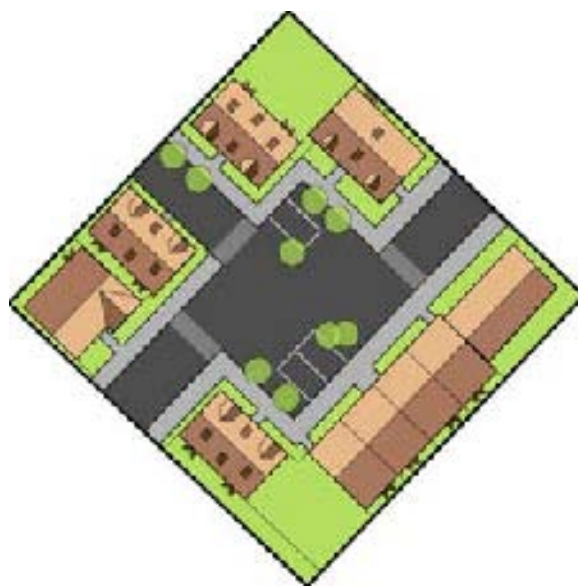


Fig.29 Radyr Sidings – This site plan extract shows how passive speed reduction can be achieved through staggered junctions, on-street parking and planting.



Fig.30 On-street parking at Radyr Sidings narrows the street and limits speeds.

Obj 3.5 Incorporate parking effectively



- Parking provision should be effectively incorporated into the design of the development, should not dominate the street scene and should not inconvenience pedestrians or cyclists. It should help to define an attractive and well used street and encourage the use of front entrances to dwellings.
- Provision should ideally be mixed in type, with primary parking available on-street coupled with appropriately sited small, illuminated, secure and overlooked rear parking courts or spaces to the side of dwellings. Parking courts can unduly restrict the provision of private amenity space and should not be a first resort. Parking squares or courts should be softened with landscaping and feature variable materials to avoid appearing as large monotonous spaces. The use of permeable surfaces such as “grasscrete” can serve the dual purpose of providing drainage and softening the appearance of the development.
- Off-street parking in front of dwellings should generally be avoided as it breaks up the frontage and requires dwellings to be set back from the street.
- The potential for footway parking should be reduced through the clear designation of on-street spaces and design features such as kerb build-outs and planting.
- Parking should be designed and sited such that it encourages the use of street frontage to access dwellings.
- Garages can provide a secure form of parking but their satisfactory incorporation and use can be problematic. In many instances, garages are not used for car parking and this can create additional demand for on-street parking, which often obstructs the pavement. If garages are to be counted toward meeting parking requirements, they must meet the minimum dimensions as stated in the Access, Circulation and Parking SPG. Excessive use of garages along a single frontage of terrace or mews style dwellings is discouraged as it can have a deadening effect on the street scene and negatively affect the continuity of pavements.



Fig.31 Examples from Poundbury: Effective provision of on-street parking that does not encroach onto the pavements and is broken up by trees.



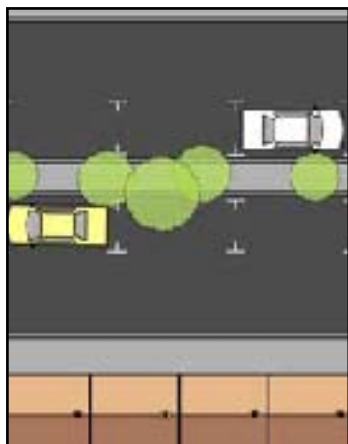
Fig.32 Image courtesy of Ian Bentley(RUDI)/CABE



Fig.33 Home zones incorporate on-street parking and reduce traffic speeds by varying the path of the carriageway.

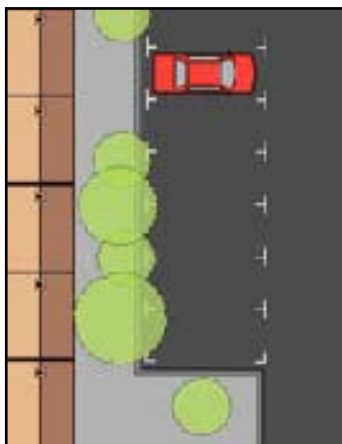
A selection of parking arrangements that provide enclosure of the street scene and encourage the use of front building entrances are featured below.

1. On Street: central reservation



Kerbside parking arranged both sides of strip dividing traffic flows with marked bays for parking in same direction as the traffic flow. Landscaping a benefit.

2. On Street: right angled



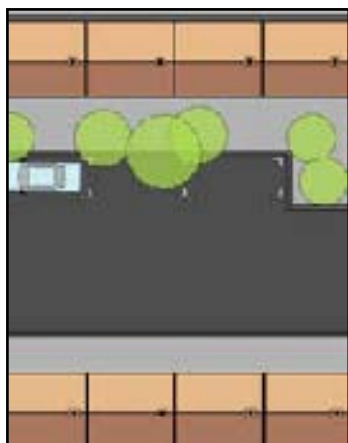
Kerbside parking at right angles to axis of pavement, generally in marked bays. Increase in building heights needed to compensate for wider street. Needs landscaping.

3. On Street: angled to pavement



Kerbside parking at less than right angle to axis of pavement, generally in marked bays. Needs landscaping.

4. On Street: In line with pavement



Kerbside parking parallel to the axis of the pavement, bays may be either marked or unmarked. Landscaping a benefit.

5. On Street: housing square



In line kerbside parking arranged around sides of landscaped central space, further parallel parking to other side of surrounding streets.

6. On Plot: car port



Open sided frame structure, generally located to side of house, may be paired with neighbour. Ports sometimes incorporate outdoor private amenity above, such as a sun terrace.

Illustrations are not to scale. Required parking space dimensions, and further information regarding this objective, can be found in the Council's Access, Circulation and Parking SPG and in the Manual for Streets.

Legible development layouts are easy to understand and help to create the identity of a place and the perception of it by others. The structure of key streets, intersections and spaces forms the main impact of a place and makes it easy for people to orientate themselves and to find their way around.

Obj 4.1 Street Character

- Create a discernable range of streets and spaces with each having its own individual character and movement role according to the user hierarchy. This can be achieved by varying carriageway and footway widths, the design and scale of buildings, the street's relationship to buildings and the private realm and other details such as parking arrangements, street trees, planting and lighting.
- The development of a range of street types implies making some streets more significant in both movement and urban design terms than others so that they stand out. This differentiation can provide a clear identity for each street, thus helping people to find their way around a development.

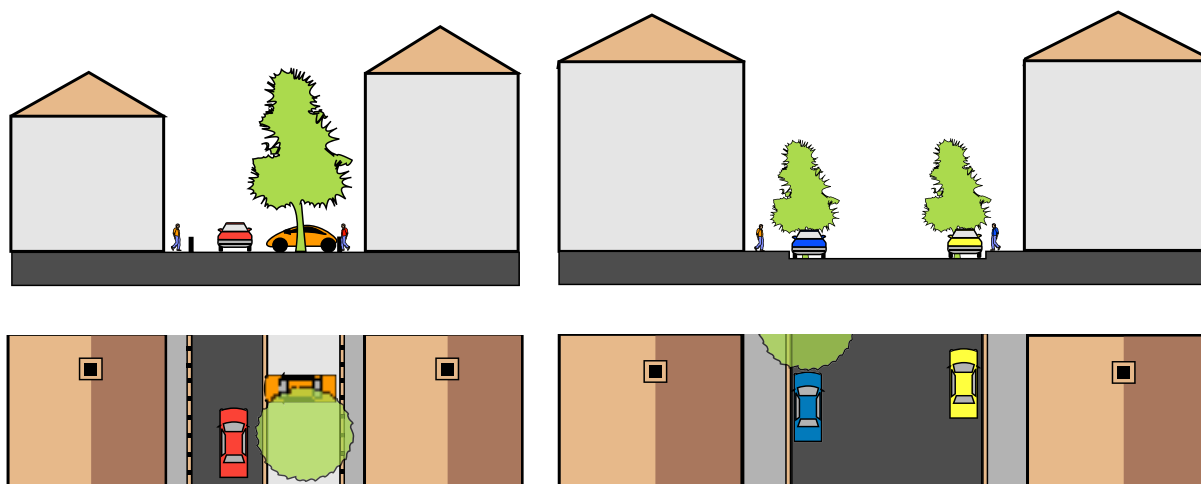


Fig.34 Streets can be given different cross sections to express their relative importance in terms of both movement and urban structure strengthening legibility

Obj 4.2 Ease of navigation

- Provide a development form with a coherent and well structured layout that is easy to navigate and contains logical routes following "desire lines" throughout and across the site.
- Include landmarks, focal points, strong corners and memorable spaces that create a sense of place and allow residents and visitors to form a clear "mental map" of the development.



Fig.35 An extract from Doe Close highlighting an entrance feature and key frontages around an important open space and defined route.

Obj 4.3 Integration



- Reinforce local movement patterns by integrating the development into the existing urban fabric. Ensure that the site is contiguous with existing development patterns by continuing existing linear features, such as landscape elements, streets, cycleways and footpaths.



Fig.36 Cardiff Road, the wider hierarchy – It is essential that new development links into the broader level of legibility to inform the development both in terms of connections and identity.



Fig.37 The sub-division pattern of Cardiff - within the grid layout there is a clear hierarchy of movement which is supported by the scale of the built form. The main streets integrate with the rest of the city, a principle which can be applied to a site of any size. However accessibility and legibility is just one element of urban form.

Enclosure and continuity of street frontage creates spaces that are overlooked and are therefore safer and more pleasant to use. Such spaces maximise opportunities for social interaction and create a stronger sense of place and a more recognisable identity for a development.

Obj 5.1 Active frontages

- Reinforce a legible street layout and encourage vitality by providing a continuous active street frontage, particularly at ground floor.
- Buildings should feature 'public fronts and private backs' as more private rear elevations and garden fences/walls can deaden the street scene if they face onto it. Windows to particularly active rooms such as living rooms and kitchens should face toward public space.
- Main building access should be from the street frontage with well-defined entrances at frequent intervals. Blocks of flats should maximise the number of front doors onto the street and ground floor flats should ideally have separate entrances.



Fig.38 A typical street. A tight terraced form maximising continuity, enclosure and overlooking.



Fig.39 The perimeter block is an effective way to create streets and spaces. This example shows a variety of ways that a block can be configured.

Obj 5.2 Structure and scale

- Ensure the block structure/layout allows for overlooking and enclosure of streets and spaces by creating an appropriate building height in relation to street width and a clear distinction between public and private areas. In practice, perimeter blocks are the best way to achieve this.

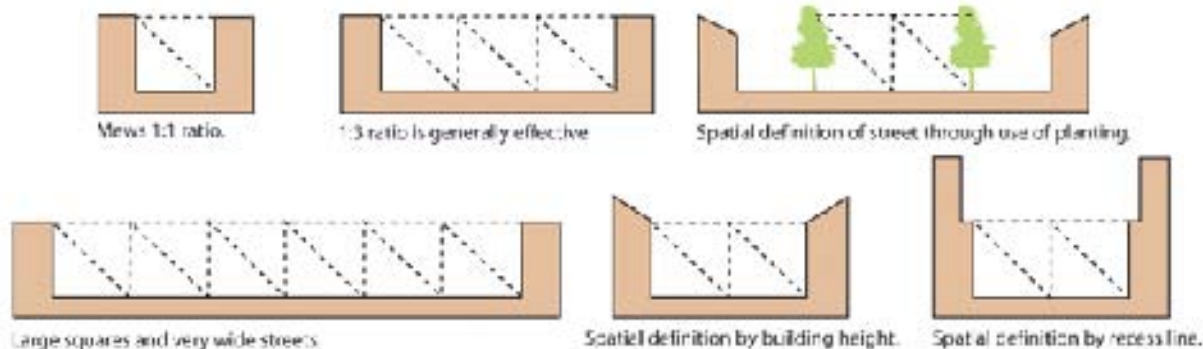


Fig.40 Street cross-sections showing a variety of height to width ratios

Obj 5.3 Defined spaces



- Provide clearly defined spaces through the use of variable yet consistent building design, landscaping and materials. In the absence of building frontages, use hard and soft landscaping as appropriate to provide continuity and the enclosure of streets and spaces. Utilise a mixture of parking solutions to avoid disruption to frontages and the need for excessive building set-backs.
- Enclosed front gardens or patio areas should generally be provided as they can improve the visual appearance of the street scene and increase the perceived sense of security by acting as a buffer.
- Close-boarded fences should be avoided on side or rear boundaries that front onto public spaces and parking areas as they can have a poor visual appearance and be difficult to maintain long-term. High quality brick walls or other such boundary treatments should be provided instead.



Fig.41 Fisher Hill Way, Radyr Sidings – High-quality brick walls provided where rear gardens border the public realm.



Fig.42 Fisher Hill Way, Radyr Sidings – The building line is slightly varied to provide visual interest but the consistent front boundary walls and hedges provide an element of continuity.

The public realm is the space that is physically and visually accessible to the public. In residential developments it includes the streets, green spaces, squares and playgrounds. The public realm is where chance meetings between neighbours happen or community events occur. It is vital not just to the quality of a development but how pleasant and sociable it is to live in. Successful spaces can help create a sense of place and give the development a distinctive identity.

Obj 6.1 Integration



- Public space should be well designed and integral to the character of the development. Dwellings should have direct access onto open spaces, which should be overlooked by active building frontages in all instances.
- The incorporation of focal points or centres within a development, particularly where a number of streets meet, can provide a community focus and a meeting space for residents. These places can be good locations for integrated public art, trees and areas of shared parking.
- Public spaces should be located centrally and designed such that they create a sense of ownership by the wider development and are thus protected and looked after.
- Landscaped areas that serve no purpose as part of the public realm should be minimised as they can be awkward and often present maintenance difficulties.



A. Circus
B. Crescent
C. Mews
D. Green
E. Close
F. Square

Fig.43 A composite illustration of a range of spaces that could be incorporated into a development



Fig.44 Barquentine Place – Integrated and well-overlooked play space

Obj 6.2 Differentiate



- There should be clear differentiation between public and private spaces to minimise the potential for conflict between the users of space and owners of adjacent properties. This can normally be achieved through the use of good quality boundary treatments that provide a clear transition.
- Differentiation is particularly important at the front of dwellings and can be achieved by the incorporation of small front gardens with low and visually permeable walls/railings.

Obj 6.3 Setting and detail



- Public spaces should enhance the setting of buildings and be provided at a scale appropriate to the size and location of the development proposed.
- Spaces should be enclosed and feature simple, well designed and robust street furniture located to minimise visual clutter, physical obstruction and anti-social behaviour. Particular regard should be had to hard and soft landscaping, means of enclosure, boundary treatment, orientation (i.e. south facing), public art and the durability of any materials to be used.
- Additional guidance on the type and size of open space required can be found in the Council's Open Space SPG.
- Public art can significantly enhance developments, contributing to all aspects of urban design, from street furniture and paving to building design and landscaping. The 'Public Art SPG' provides guidance on where Public Art will be sought in developments and the issues that should be taken into consideration during the development of an artwork proposal.



Fig.45 Barquentine Place – Public art incorporated into an area of open space creates a memorable place within the development.



Fig.46 Henke Court – Public open space featuring art and landscaping successfully incorporated into the development.

Obj 6.4 Management



- Public spaces must have a clear long-term management plan to ensure that they are maintained in a safe, useable and welcoming condition. Otherwise they may become sufficiently degraded over time and begin to detract from the character and amenity of the development.
- Underground services should be sited where they can be easily accessed or upgraded with minimal disruption, such as under pavements with removable paving or in shared service trenches.

There is an increasing need to mix uses and unit types in order to build sustainable communities. Whilst this is particularly the case for larger developments, even small developments may be able to incorporate a mix of tenures small-scale shops, offices or workspaces. Variation should also be extended to building size, type and design, to avoid developments having a monotonous appearance.

Obj 7.1 Mix of units

- Provide a mix of accommodation and tenure tailored to the needs of the local community. This will ensure that there are housing options available for all members of society.
- Affordable housing should be provided in clusters throughout the site ensuring that in terms of building form and external appearance they are indistinguishable from private housing. Affordable Housing also needs to meet Welsh Assembly Government design requirements (DQR) and Welsh Housing Quality Standards (WHQs).



Fig.47 Local shops, such as this one along Lloyd George Avenue, provide convenience for nearby residents.

Obj 7.2 Mix of uses

- Proposals should be designed to make the best use of existing local facilities. However, where these are scarce or not likely to meet the needs arising from the new development, then suitable non-residential uses, such as employment, services and amenities, should be accommodated within the development to provide convenience for future occupiers. A mix of uses can make developments more self-contained and reduce the need to travel, thus making the development more sustainable.
- A larger number of small uses as opposed to a single large use is preferable as they increase street activity and frontage animation by having more windows and entrances. A greater mix of uses increases street activity and the vitality of the area and helps to create balanced communities. The provision of live-works units can help to mix uses vertically as well as horizontally.



Fig.48 Live-work unit, indicative layout.

Obj 7.3 Building variation

- Developments should provide a mix of building types and styles to add visual interest and to avoid the area having a monotonous appearance. Existing buildings should be retained on site where they would contribute to forming a distinctive character for the development.
- The subdivision of larger sites into smaller development plots with direct access to roads and spaces can help to create diversity, especially if different architectural approaches are utilised.



Fig.49 Edward England building, Lloyd George Avenue: Its conversion and extension has resulted in a residential development with distinctive character and a robust form.

Buildings and spaces should be designed so that they are flexible and adaptable and can be used for a variety of uses over time. Successful buildings may change use several times over their lifetime so flexibility and durability are vital to long-term sustainability and longevity. In the widest sense, developments should be able to adapt to changing social, technological, economic and environmental conditions over time.

Obj 8.1 Durability

- Internal spaces and the layout of the development should be high quality and allow for adaptation, conversion and extension in the future. Developments should be designed with the requirements of the end-users in mind and be able to suit their varied needs throughout their life-cycle. To this end, the principles of inclusive design can be used to develop “lifetime” homes that can accommodate changing needs and lifestyles.

Obj 8.2 Flexibility

- Proposals should incorporate robust yet flexible public spaces and streets capable of multiple functions and uses. All buildings should have a degree of flexibility but those along primary routes or around key spaces should be designed to allow for changes to non-residential uses in the future. This primarily involves the provision of ground floors with increased internal ceiling heights.
- The layout of a development should allow for future redevelopment and it is critical that short-term decisions should not prejudice beneficial long-term change. Proposals should allow for the incorporation of additional links in the future and an integrated, permeable grid layout is the best way to maintain flexibility for this.



Fig.50 Pontcanna: Buildings can change use several times over their lifetime and should be designed to be flexible and adaptable as many of these large Victorian houses.

Obj 8.3 Build for the future

- Regard should be had to natural processes, such as flooding and prevailing weather patterns, and their implications for the proposed development. Climate change and the impact that varying conditions, such as water scarcity, changing temperatures and increased incidence of flooding, could have on the viability of a development should also be considered. Suitable precautions should be taken, for example under-floor voids, additional insulation and water efficient fixtures and fittings, such that the long-term sustainability of the development is not prejudiced. The requirements of Technical Advice Note 15 : Development and Flood Risk (July 2004) must also be met.

The principles of Crime Prevention Through Environmental Design (CPTED) can shape the built environment to create spaces that have a clear identify, function and sense of ownership. This encourages all people in the community to take an interest in and to become more aware of their everyday environment, which in turn leads to the establishment of safer communities.

Obj 9.1 Incorporate natural surveillance

- Public spaces and parking areas should be overlooked by incorporating natural surveillance into the design of the development. Dwellings should be orientated to provide back to back protection whilst overlooking the streetscape and the wider public realm from active rooms on the front and side elevations and particularly at ground floor level. Rear gardens facing toward public spaces or parking areas are vulnerable and should be avoided. Deep recesses or spaces that would be poorly overlooked should be avoided.
- Pedestrian routes and cycle ways should follow the street network and not be sited in isolated areas. Routes that will be underused or that are not overlooked should be avoided, such as gulleys, rear lanes or connecting footpaths at the end of cul-de-sacs, as they can attract crime and antisocial behaviour. Landscaping should be sited sensibly to avoid obscuring views and lighting located where it will be most efficient. Ensure landscaping and tree growth will not compromise lighting in the future.

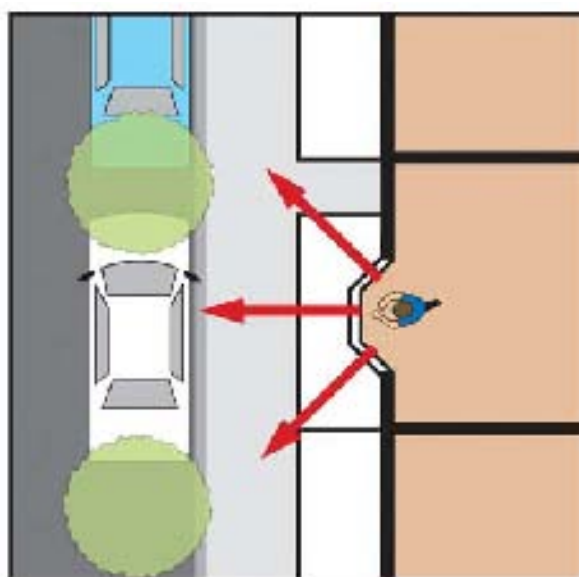


Fig.51 Overlooking windows and actively used front doors help to create a safe street. Shrubbery can create a degree of privacy but should be managed so that it does not unduly limit surveillance.



Fig.52 Regents Place – Rear gardens that front onto this parking area feature open metal railings instead of close-board wooden fencing. This provides natural surveillance whilst presenting a high-quality appearance to the public realm.



Fig.53 Regents Place – This end of terrace house features windows on the flank elevation, providing surveillance of the adjacent parking area.

Obj 9.2 Create defensible spaces



- Defensible space around buildings and a sense of ownership can be created with both physical and symbolic boundaries. Thought should be given to the use of defined borders, framed entrances, dwelling orientation, fenestration and siting of access routes to reinforce the identity and enjoyment of a place.
- Buildings should turn corners where possible and feature active windows on flank elevations to avoid the creation of “dead spaces”.
- Regard should be had to the way in which spaces will be used and will appear at different times of day, particularly at night.
- Suitable counter measures, such as additional lighting or other forms of surveillance, should be incorporated on sites considered to be at a higher risk of crime.

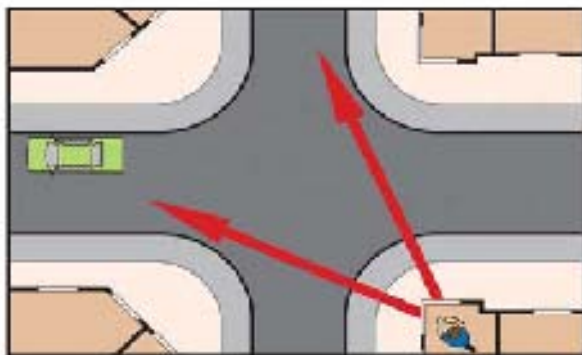


Fig.55 Corner windows can provide views in several directions.



Fig.54 This building frames the junction, features active rooms on the outward facing elevations and has good sightlines over the streetscape.



Fig.56 Junction Terrace, Radyr Sidings: This house turns the corner and has a full view of the public realm, creating defensible space.

Further information regarding this objective can be found in the Cardiff Community Safety Partnership's guidance 'As Safe As Houses?' – *Crime and the Built Environment*

The landscape is one of the most important resources of Wales and needs to be protected and enhanced with high quality design solutions that complement or contribute to landscape character. Biodiversity is one of the building blocks of all life and needs to be preserved and enhanced wherever possible.

Obj 10.1 Landscape and ecology

- Existing landscape and ecological features on the site should be identified through an ecological assessment and be incorporated into the design of the development and enhanced wherever possible.
- Existing watercourses and landscape features such as hedgerows and trees (protected or otherwise) can be particularly valuable ecologically. These features can form a positive part of the vision for a site's development and can help to give a site a distinct identity.
- The protection of established features of value must be ensured during site clearance, the construction process and subsequent habitation of the development. Where sites are proposed in close proximity to a perimeter of existing woodland, sufficient buffer strips will be required in order to allow the woodland or site owner to actively manage a margin of smaller growth that will allow the ecology of the woodland itself and health of individual trees to be retained without causing excessive problems for prospective residents through leaf and branch fall, shading of gardens and overbearing. It will not be acceptable to propose structures or gardens so close to a woodland that the edge trees require repeated pruning to make them tolerable to residents.
- In the event of brownfield redevelopment, the creation of such spaces can boost the overall net benefit of a development.
- The retention of open soils and permeable surfaces limits surface run-off and supports biodiversity on site and should be utilised throughout the development.
- The Council's Trees and Development SPG provides further guidance for the retention of trees, woodlands and hedgerows within the landscape.



Fig.57 Reardon Smith Court – Existing trees successfully incorporated into an area of central open space. They contribute significantly to the character of the development.



Fig.58 Heol Terrell – Retention of existing trees and provision of mature landscaping add value to this development.

Obj 10.2 Biodiversity



- Proposals should promote biodiversity in terms of both flora and fauna through the provision and support of suitable habitats where possible. Particular regard should be had to the use of native plants and provision for protected or rare species.
- Wildlife corridors can be provided as part of an overall network of connected green spaces including open space and watercourses.
- The Council's Biodiversity SPG explains the action which should be undertaken if protected species are present on a site. It is important that no works are undertaken until the necessary investigations have taken place.
- A buffer zone should also be implemented and maintained along water courses for biodiversity reasons.



Fig.59 Radyr Sidings – This development has been designed to respond well to the adjacent Radyr Woods community nature area, which features a local nature reserve.

Obj 10.3 Landscape vision



- The preparation of a clear vision for the landscape of the site is an essential part of the preparation of an overall design vision for the development and needs to be considered at the concept stage of any proposal. A structural landscape scheme, informed by specialist advisors, particularly landscape architects, should be provided as part of a design statement submitted with any application for residential development.
- Solutions which combine existing natural features with proposed public spaces, movement corridors and additional elements, such as sustainable drainage solutions and innovative play and recreational facilities are often the most successful in creating sustainable landscapes. Public spaces and landscaped areas need to be closely integrated with the built form of the development, be well overlooked and have a clear sense of purpose.
- Further guidance on the integration of landscape into the street and public realm can be found in the Access & Movement and Public Realm sections of this guide.



Fig.60 Example of a landscape strategy.

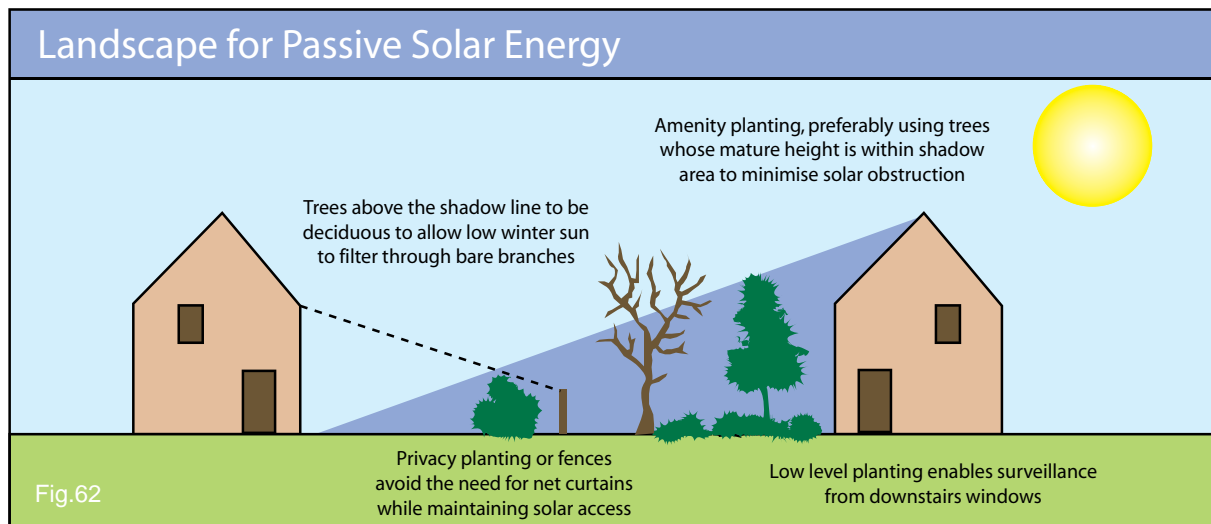
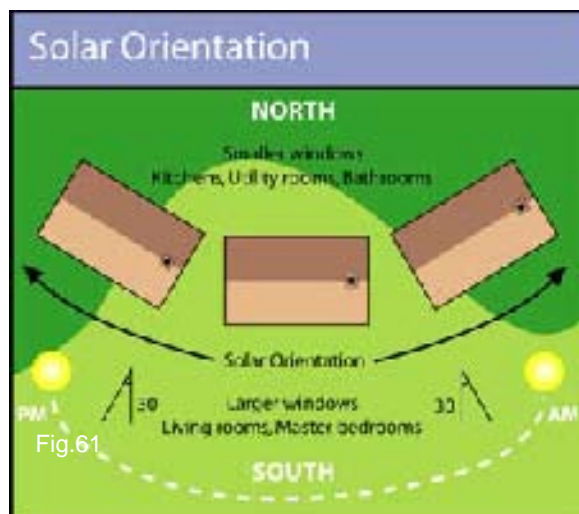
Buildings and landscape should minimise resource use in their construction, operation and maintenance. The initial design of a building can have a huge impact on energy usage over its lifetime and its interaction with the wider environment. Developments should be built to a high standard to reduce the need for costly retro-fitting in the future. The following environmental sustainability criteria should be addressed as part of any design statement.

Obj 11.1 Raising Standards

- Proposals should seek to outperform statutory minima, such as Building Regulations, and take advantage of advances in construction and technology to enhance performance, quality and attractiveness. The Council encourages developers to support national targets for reduced carbon emissions and recognises EcoHomes standards as a means of achieving a more sustainable approach to residential development. The Council would wish to see residential development meeting the target of an EcoHomes 'Very Good' rating (or equivalent) in the short term, moving towards the target of 'Excellent' rating in the long term in support of this objective.

Obj 11.2 Efficient design

- The environmental impact of proposals should be minimised through the careful siting and orientation of dwellings and the use of water efficient technology, such as rainwater harvesting and grey-water recycling systems.
- Passive design can be an effective way to deliver energy efficiency and involves considering the orientation of buildings to create the correct balance of shade and solar gain, optimal levels of insulation, compact building forms (e.g. terraced houses and flats), integration with the existing landscape of a site, suitable thermal mass, the use of natural ventilation and appropriate window sizes. Improving the airtightness of the built fabric is a key priority in reducing heat loss and improving energy efficiency.



Obj 11.3 Renewable energy

- Renewable energy systems can assist mitigation efforts against climate change. They should be designed in from the outset of projects to ensure that the development form maximises their potential. The potential for integration of renewable energy sources, such as solar water heating systems, solar photovoltaic (PV) panels, wind turbines, biofuels and ground source heat pumps should be investigated in all instances. The use of combined heat and power (CHP) should be considered for all larger-scale developments.



Fig.63



Fig.64 Recent developments at Allerton Street and Angelina Street feature integrated solar hot water systems.

Obj 11.4 Sustainable materials

- The use of materials that are durable, sustainably produced, have low embodied energy both in terms of their production and transportation to site and can be recycled or reclaimed when the building comes to the end of its life is preferred. This would normally favour the use of locally sourced materials. However, it may equally mean using extremely “low energy” materials made elsewhere and provided to the site as pre-fabricated elements. The use of whole life costing can help determine the most sustainable materials to use.
- Buildings and materials already on-site should be reused where possible to limit the amount of building waste and to minimise the amount of new building material required.



Fig.65 The Coach House – Constructed with recycled materials and sustainably-sourced timber and insulation (Thermafleece).

Obj 11.5 Sustainable Drainage



- Sustainable drainage systems (SUDS) can reduce run-off from a development and the incidence of flooding. They should be integrated into a proposal at an early stage to maximise effectiveness. Hard landscaping should be avoided in preference to soft landscaping or permeable paving. Soak-aways, balancing ponds, reed beds, swales and other sustainable drainage elements can support biodiversity, landscaping and open space on a site and should always be integrated as a positive part of the layout where possible.

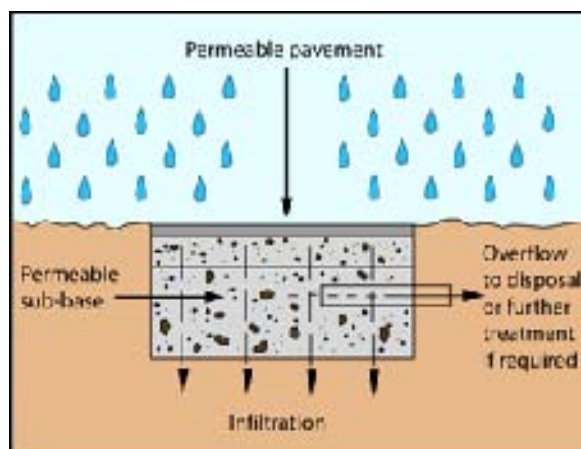


Fig.66 Permeable pavements reduce run-off and the need for surface water drains.

Obj 11.6 Microclimate



- Regard should be had to the natural microclimate of a site when determining the layout of a development. Tree planting, shelterbeds and green roofs can improve microclimate and provide additional shading to reduce the urban heat island effect.



Fig.67 Barquentine Place – Trees and significant areas of open space can improve the local microclimate.

Obj 11.7 Recycling



- Proposals should be designed to support recycling and composting by their future occupants by providing suitably sized external and internal space for segregated refuse and recycling storage and collection. The Council's Waste Collection & Storage Facilities SPG provides further guidance regarding the incorporation of recycling facilities within developments.

1. Character and Appearance:



- Does the scheme have a clear design vision and feel like a place with a distinctive character?
- Does it respond well to the existing context, scale and urban grain?
- Do buildings exhibit architectural quality and improve the character and appearance of the area?
- Is the appearance and setting of any nearby historic buildings or features respected?

2. Compactness:



- Is the density of development appropriate for the character of the area?
- Is well defined public space and useable, adequate private amenity space incorporated?
- Does the design provide a high standard of residential amenity and avoid problems such as overlooking, overshadowing and overbearing?
- Are service areas sensitively located and well screened?

3. Accessibility and Ease of Movement:



- Is the development permeable with easy access to local services and facilities, including public transport?
- Does the development comply with the principles of inclusive design?
- Does the building layout take priority over the roads and car parking, so that highways do not dominate?
- Does the design of the development limit vehicles speeds so that streets are pedestrian and cycle friendly?
- Is car parking well integrated so it supports the street scene?

4. Legibility:



- Are streets defined by a coherent hierarchy and a well structured layout?
- Do buildings and the layout of the development make it easy to find your way around?
- Does the scheme integrate well with existing roads, paths and surrounding development patterns?

5. Continuity and Enclosure:



- Is a continuous active street frontage that encourages the use of front entrances provided?
- Are buildings orientated to provide public fronts and private backs?
- Is the quality of the street frontage improved by the choice and siting of landscaping and boundary enclosures?

6. Public Realm:



- Is public space integral to the development, well designed, robust and enhanced through the incorporation of seating, play equipment or art?
- Are adequate transitions provided between public and private spaces through the use of hard and soft landscaping?
- Are suitable management arrangements in place?

7. Variety and Diversity:



- Is there a mix of accommodation and tenure that reflects the needs and aspirations of the local community?
- Is there a mix of uses on the site, such as shops, cafes, live-work units or community facilities?
- Are streets and spaces animated with a mix of front entrances and uses?
- Does the development feature a mix of building styles or retain any existing buildings of interest?

8. Adaptability:



- Do internal spaces and the layout allow for adaptation, conversion, extension or redevelopment?
- Is the overall development robust enough to adapt to changing conditions, such as climate change, over time?

9. Designing Safer Environments:



- Do public spaces and pedestrian/cycle routes follow the street network and benefit from natural surveillance?
- Do buildings feature defensible space around them and do they turn the corner where appropriate?
- Is back to back protection provided through the use of perimeter blocks or similar techniques?

10. Natural Heritage and Landscape:



- Are existing landscape, ecological or topographical features of the site incorporated as positive aspects of the development?
- Does the development improve local biodiversity through the provision of areas of Natural open space, wildlife corridors and watercourses? Are management measures in place to maintain areas in perpetuity?
- Has a clear landscape vision for the site that integrates open and public spaces been developed?

11. Resource Efficiency:



- Does the development have any features that reduce its environmental impact?
- Is there an aspiration to meet the Eco homes rating “Very Good” or “Excellent”?
- Have measures been taken to minimise resource use in the construction, habitation and maintenance of the development?
- Has consideration been given to orientation for solar gain, renewable energy, water efficiency and the use of sustainable materials?
- Are sustainable drainage systems an integral part of the development proposals and maintained in perpetuity?

A thorough design process is required to ensure successful design solutions. The Design Statement submitted with the planning application should establish how this process has been followed.

Inception Phase

It is essential to establish a strong design team with a proven track record in delivering sustainable design.

Consultation and Engagement

Pre-application discussion with the local authority will establish the parameters within which the development is to be assessed.

Opportunities for engagement with the local community should be considered by the developer as part of the design development process.

Policy Review

The design statement should set out the policy context of the development with reference to the following guidance:

National Policy:

Planning Guidance Wales and associated Technical Advice Notes and MIPPS and The Manual for Streets.

Local Policy:

Current Development Plan and associated Supplementary Planning Guidance.

Site Analysis

A site analysis needs to be undertaken and set out in the design statement to cover the following areas:

Design context: Building form and massing; Density; Urban grain and space/built form relationships; Local or strategic views; Topographic and landscape analysis; Ecological features; sunpath/overshadowing.

Historic analysis: Conservation areas (Council may have published a conservation area appraisal); Listed buildings; Local features.

Movement analysis: Main routes, local facilities/traffic generators, paths and cycleways, public rights of way, public transport networks, scoping of transport assessment.

Site constraints: Contaminated soils and filled areas; Microclimate and noise sources; underground services and drainage systems.

Social Context: Important in understanding how development can contribute to the local community and influences the social mix to be provided. The security context should also be investigated.

Design Vision

A clearly expressed vision or '**concept statement**' should guide the vision for the type of place to be created. This should be a holistic vision for the buildings, the spaces between and the landscape character.

Design Codes

The development of a set of '**Design Codes**' provides a clear set of the design requirements to achieve the vision for the development.

Submission of a Planning Application

Providing the right information :

Sufficient information needs to be provided to ensure that design issues can be properly addressed. Any outline application for a large development may involve the submission of a [masterplan](#) or [design code](#) for approval. A [landscape plan](#) may also be required.

Design Statement : The design statement explains the thought processes behind the design and should demonstrate how design objectives have been met and how the design has addressed the development context. Sustainability criteria should be integrated into the design statement.

Access statements : Where access statements are required, they should demonstrate how the principles of inclusive design have been considered from the outset of the development process.

Design Appraisal of the Application

Appraisal : Appraisal against national and local design policy is undertaken by officers of the Council with recommendations made to the Planning Committee as part of the Development Control process.

The [Design Commission for Wales](#) offer a design review process which can be requested by the developer or may be undertaken at the request of the Local Planning Authority.



Fig.68 Images of Colchester avenue by Bovis Homes Ltd

Key Information

Date Completed:
September 2004

Client:
Bovis Homes Ltd

Architect/designer:
Bovis Homes Ltd

Number and type of dwellings:
Total of 74 units; predominantly 3 bed town houses and 1 & 2 bed apartments. Affordable housing: 3 bed town houses & 2 bed apartments.

Overview



The vision for this tight former depot site was focused around the provision of traditional urban forms which, coupled with architectural detail and landscaping, would create a sense of place. The layout forms distinct spaces around which the development has been focused. A coherent approach to the architectural qualities of the development gives the scheme an overall identity whilst the open spaces provide legibility and give the sub areas of the scheme differing characters. Utilising traditional terrace forms, compact and continuous facades front onto streets providing structure and surveillance of the public realm. In addition, several units have received the Secure By Design Award.

Principles Achieved in the Scheme



Character and Context

- A successful vision relating to building line, street width/building height ratio and formal open spaces.
- Continuous building lines and terraced forms reference the traditional Cardiff terraces.

Compactness

- The layout generates a compact terraced form structured around formal open spaces.
- The layout maximises the capacity of the site.

Accessibility and Ease of Movement

- All units are accessed via the central street which provides a legible and focused route.
- Shared surfaces are provided in suitable locations, reinforcing pedestrian priority.
- Formal and informal on-street parking and rear parking courts have been provided.
- Tight corners reduce vehicle speed and open into pedestrian friendly streets and spaces.

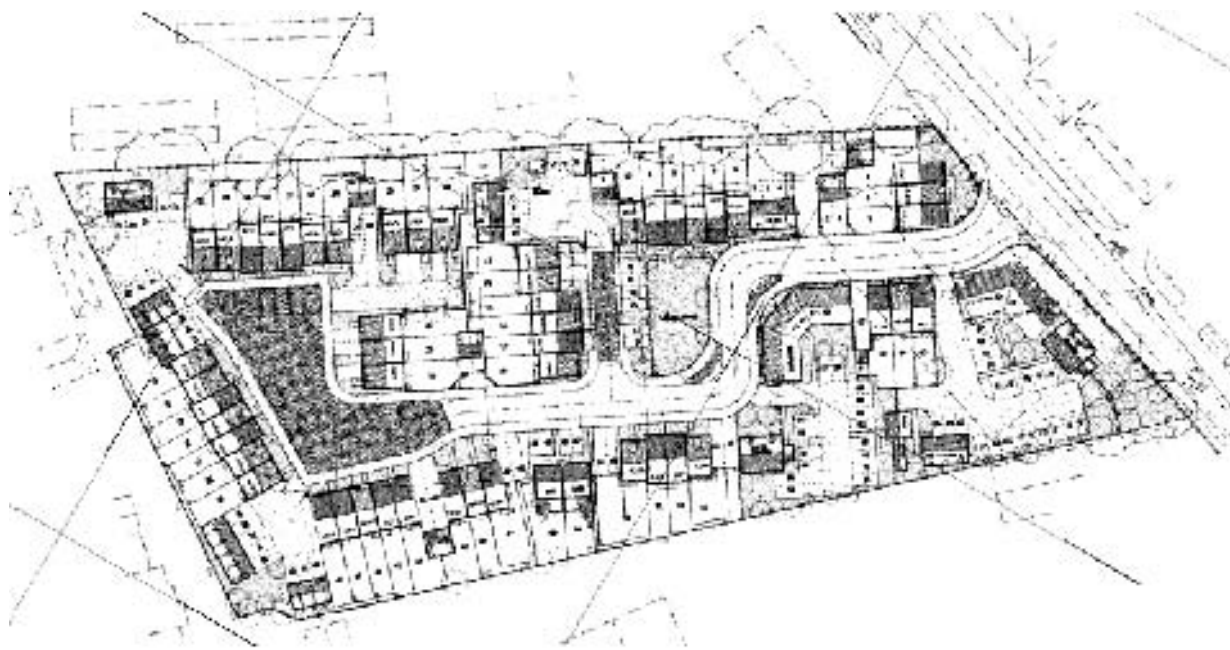


Fig.69 Plan of Colchester avenue by Bovis Homes Ltd

Legibility

- 3 storey buildings are located at the entrance to the scheme creating a legible access point.
- Tight terraced forms help to strengthen and hold corners, key frontages and a simple layout create an easily understood development.

Continuity and Enclosure

- The terraced forms provide continuity to the building line along all streets and spaces.
- Location of buildings maximise enclosure to the spaces.
- Entrances and windows provide active frontages to streets.

Public Realm

- 2 distinct formal spaces have been provided: the formal green and the formal square.

Variety and diversity

- Mixture of types and sizes of units.
- A variety of townscape forms and spaces.



Fig.70 Image of Colchester avenue by Bovis Homes Ltd



Fig.71 Inside and out: Steffani Court: pcko/pentan

Key Information

Date Completed:

October 2003

Client:

Cardiff Community Housing Association

Architect/designer:

PCKO (pre contract),
Pentan (post contract)

Number and type of dwellings:

Total 28 units; 7 no. three-storey houses; 19 no. one and two bedroom apartments; 2 no. mobility access two-bedroom apartments

Overview



The site is located in a residential area but was in commercial use prior to development. Contextually the immediate area consists of a number of council built buildings in the form of maisonettes and flatted blocks. The redevelopment was approached as a regeneration project and was supported by both Cardiff County Council and the Welsh Assembly Government.

A considered vision based on the requirements of the local Yemeni community and potential end users was developed through extensive community involvement. The scheme design has translated the vision into a form and layout that achieves a connection to Yemeni community both in terms of identity and density. The vision is evident in the layout and architecture as well as the internal arrangement of open space and materials. This process has resulted in a high quality scheme that achieves a number of essential urban design criteria.

Principles Achieved in the Scheme



Character and Context

- Strong vision based on the creation of community space rather than architectural style
- Creates a new positive identity which references characteristics of its context, such as massing, height, etc
- Vertical division of buildings gives an impression of plot width and achieves a level of variety and architectural interest in the façade

Compactness

- Layout and resulting density relates directly to vision through the creation of a compact form arranged around a central courtyard
- Open space provision is offsite but within easy reach (approx. 100m away)
- Courtyard open space is integral to the scheme

Accessibility and Ease of Movement

- The design of central courtyard space is closely related to that of a home zone, creating a safe community area
- Vehicle speed has been reduced in the central space through the use of shared surfacing and pedestrian orientated design
- Accessibility for all has been considered both in terms of access to dwellings and external areas

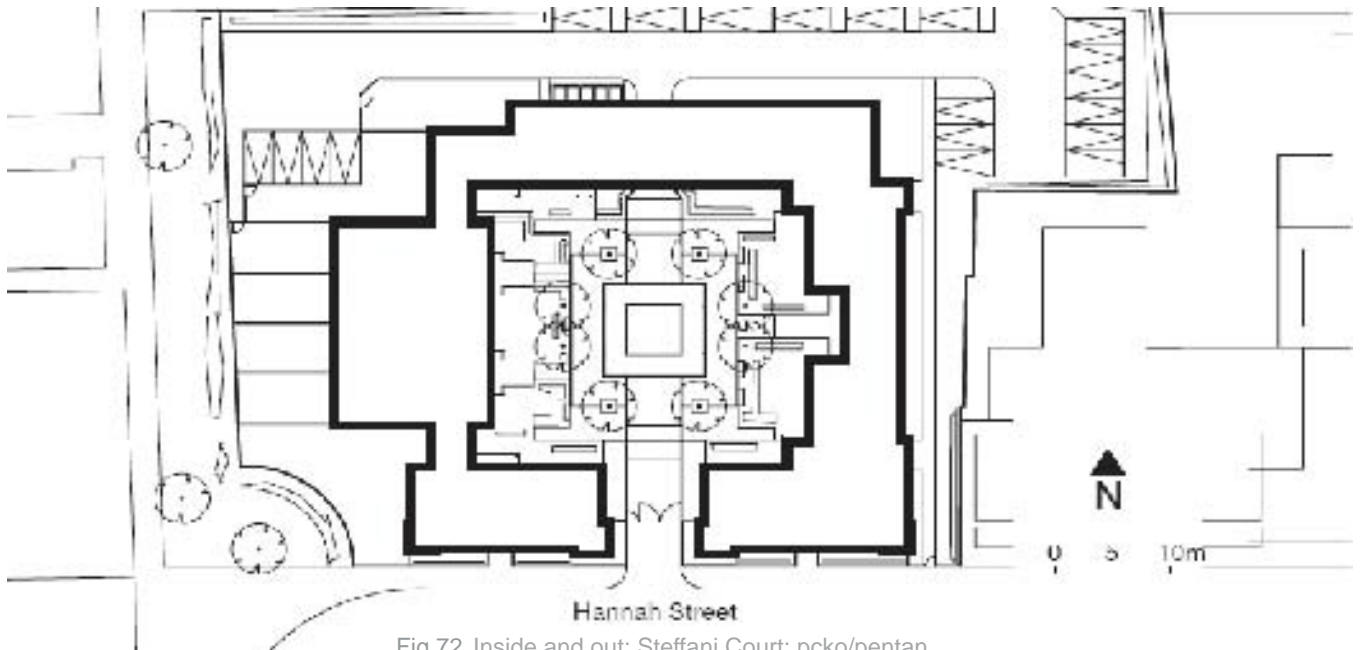


Fig.72 Inside and out: Steffani Court: pcko/pentan

Legibility

- Courtyard space has been carefully considered to create a memorable space and focal point
- Continuous frontage with gaps clearly demarcating entrances

Continuity and Enclosure

- Block structure and layout allow overlooking of both the street and internal courtyard
- The design and siting of the building gives enclosure to the street
- Parking is sited to the rear to avoid disruption to the continuity of the façade
- Entrances and windows provide active frontages to Hannah Street
- The development contributes to the vitality of the street as well as internal spaces
- Low boundary wall adds to the enclosure of the street and continuity of the façade

Variety and diversity

- Mixture of types and sizes of units

Adaptability

- Block integrates with surrounding urban fabric by protecting potentially exposed backs and sides of existing units whilst presenting active frontages to Hannah Street
- Courtyard has a simple and robust layout and detailed design
- Lifts allow elderly people to gain access to upper floors

Designing Safer Environments

- Corner windows ensure that the street is well over-looked.



Fig.73 Inside and out: Steffani Court: pcko/pentan



Fig.74 Images of Regents Place by Charles Church

Key Information

Date Completed:
*Under Construction,
due to be completed
2007-2008*

Client:
Charles Church

Architect/ Designer:
Charles Church

Number and type of dwellings:
*Total 172 units in 6
phases; 105 no. 1 & 2
bed apartments and 67
no. 3 bed three storey
town houses*

Overview



The Regents Place development was started in 2004. The site was heavily contaminated after being derelict for some time since the closure of the former Phoenix Brick works. A full remediation strategy was put in place and close consideration was given to the environment, the urban context and the potential end users of the development. These considerations developed the vision for the project, which has been reflected in the layout, architecture, landscaping and materials chosen.

As the development is yet to be fully constructed, a re-assessment of the achievements of this scheme will be undertaken at a future date.

Principles Achieved in the Scheme



Character and Context

- Strong vision based on providing a variety of units
- Creates a new positive identity and character for the area through the use of massing, height, design, etc
- Gable ends are presented to streets marking the ends of terraces, which responds to the character of Victorian developments around Cardiff

Compactness

- Layout and resulting density relates directly to vision through the use of a compact form of short terraces
- Higher density blocks of flats are used to define the corners and main routes within the development
- Balconies provide a degree of amenity space for some of the flats.

Accessibility and Ease of Movement

- The scheme connects to Caerphilly Road integrating the sheltered housing and doctors surgery into the wider community and providing overlooked street to these key facilities



Fig.75 Images of Regents Place by Charles Church

Legibility

- Facilities are focused around the primary access route reinforcing legibility
- Key buildings strengthen corners helping to achieve continuous facades on all streets

Continuity and Enclosure

- Block structure and layout allow overlooking of the street, internal courtyard and semi private spaces
- Location of buildings gives enclosure to the street
- Entrances and windows provide active frontages to all streets

Variety and diversity

- Mixture of types and sizes of units
- A mixture of uses over the strategic site

Designing Safer Environments

- Windows on most flank elevations ensure that the street and parking areas are well over-looked.
- Semi-open rear gardens boost the degree of on-site surveillance and avoid dead frontage.



Key Information

Date Completed:
Currently under construction, due to be completed 2007-2008

Client:
Taylor Wimpey

Architect/designer:
*Development Strategy:
Mason Richards
Partnership
Phase I: RPS Design*

Number and type of dwellings:
136 units in total: 38 two bed flats; 17 two bed units; 27 three bed houses; 54 four bed houses.

Overview



This is the first phase (3ha) of a larger (12ha) scheme. A development strategy prepared at the outline planning stage for the whole site provided a framework within which the detailed form of the development for this phase has been prepared.

The overall vision for the development was to create a distinctive, sustainable and land efficient development with clearly defined spaces and streets. This vision included the provision of a legible environment which would encourage walking and cycling through the development and a mix of densities and houses to provide a viable and varied community structure.

This development provides an exemplar in terms of the approach taken in the preparation of a masterplan for the site in consultation with the local authority. As the development is yet to be fully constructed, a re-assessment of the achievements of this scheme will be undertaken at a future date.

Principles Achieved in the Scheme



Character and Context

- The development aims to incorporate the distinctiveness of the streets and spaces of Radyr village through the development layout and form.
- The majority of the house types have been redesigned to reflect local character.

Compactness

- The three storey flat blocks and terraced form of the development provide an efficient use of land.
- The highest density of development is focussed around the central public open space and squares within the development.

Accessibility and Ease of Movement

- A movement strategy provided in the development framework establishes a clear hierarchy of streets from a primary loop access which can accommodate bus movements through to pedestrian priority routes and streets for play.
- The design of key intersections as squares are designed to reduce traffic speeds.



Legibility

- Legibility is reinforced through the provision of focal spaces and focal buildings to key vistas within the development and through a differentiation in house style and scale for different types of street.

Continuity and Enclosure

- The core central space is enclosed with a continuous frontage and is clearly legible as the heart of the scheme with three storey enclosure and key building frontages.

Public Realm

- Public space is integral to the design of the development and includes the creation of focal points throughout the development where streets intersect.

Variety and diversity

- Whilst there is uniformity in terms of a limited palette of materials used in the development, the variety of house type, scale and public realm treatment results in distinctive streets and a varied community structure.



Key Information

Date Completed:
Currently under construction, due to be completed by the end of 2007

Client:
Whitchurch Rugby, Sport and Social Club and Edward Ware Homes

Architect/designer:
ESHA Architects

Number and type of dwellings:
Total of 49 units: 41 no. flats and 8 no. houses.

Overview



The site has been redeveloped in order to provide modern facilities for the social club and to make a more efficient use of the land. The club building was originally located at the rear of the site but a modern replacement has been built toward the front. A three-storey block of flats and a terrace of townhouses have been built at the rear of the site in an angled arrangement. The replacement clubhouse and the block of flats form a gently curving crescent that frame the access and take advantage of views to the east of the site. The new townhouses are adjacent to existing terrace and semi-detached dwellings in Heol Booker and form a transition between them and the new three-storey flats.

As the development is yet to be fully constructed, a re-assessment of the achievements of this scheme will be undertaken at a future date.

Principles Achieved in the Scheme



Character and Context

- The row of townhouses references the traditional Cardiff terrace forms of development but the pattern of fenestration and the first floor bay windows gives the terrace a modern appearance.
- The block of flats has an attractive, modern design enhanced through the use of crisp materials, colour and timber cladding.

Compactness

- The three storey block of flats and the townhouses are an efficient use of land without being overly dense for the area.
- Each of the flats features individual amenity space in the form of either a balcony, roof terrace or decked patio.
- Refuse storage is centrally located yet sensibly enclosed and screened.

Accessibility and Ease of Movement

- All units are accessed via the central street which provides a legible and focused route.
- Cycle storage for the flats is located centrally.



Legibility

- The unique design of the block of flats and the use of letter panels to identify the front entrances create a distinctive and memorable space.

Continuity and Enclosure

- Strong facades provided by the social club, the block of flats and the townhouse terrace.

Variety and diversity

- Mixture of types and sizes of units.
- The replacement rugby social club provides an element of mixed use on the site.

Designing Safer Environments

- Public areas and car parking spaces are well overlooked by the dwellings.

Natural Heritage

- The replacement rugby club and the block of flats form a crescent, taking advantage of the natural topography of the site and preserving a line of existing trees to the east.



This document is not a comprehensive design guide. Further detailed information on how to address each design objective can be found in numerous other documents including those listed below:

- Audit Commission 1999**, Listen Up! Effective Community Consultation
- Biddulph, Mike 2007**, Introduction to Residential Layout
- BRE 2007**, Designing Quality Buildings
- BRE 2008**, The Green Guide to Specification
- British Standards Institute BS8300**, 'Access for Disabled People'
- Building for Life**, Delivering great places to live - 20 questions you need to answer, www.buildingforlife.org
- Cardiff Community Safety Partnership**, 'As Safe as Houses?' - Crime and the Built Environment
- CABE 2002**, The Value of Good Design
- CABE/DCfW 2004**, Creating Excellent Buildings
- CABE/DCfW 2004**, Creating Successful Masterplans
- CABE 2004**, The home buyer's guide: what to look and ask for when buying a new home
- CABE 2006**, Design and Access Statements - How to write, read and use them
- CIRIA 2007**, The SUDS Manual, www.ciria.org.uk
- CLG/CABE 2006**, Preparing Design Codes - A Practice Manual
- DfT 2005**, Home Zones – Challenging the Future of Our Streets
- DfT**, Inclusive Mobility
- DfT /WAG/CLG 2007**, Manual for Streets
- Design Commission for Wales 2006**, Design Review in Wales - The experience of the Design Commission for Wales' Design Review Panel
- DETR 1998**, Places, Streets and Movement
- DETR 2000**, By Design
- Disability Rights Commission** www.drc.org.uk, Designing for Accessibility, Centre for Accessible Environments www.cae.org.uk
- DTLR/CABE 2001**, Better Places to Live
- Ecohomes** (BRE Environmental Assessment Method), www.breeam.org
- English Partnerships 2000**, Urban Design Compendium
- English Partnerships 2006**, Car Parking: What Works Where
- English Partnerships 2007**, Urban Design Compendium 2
- Friedman, Avi 2007**, Sustainable Residential Development
- Living Roofs**, A useful general introduction to green roofs, www.livingroofs.org
- POSW 2005**, A Model Design Guide for Wales – Residential Development
- TCPA 2004**, Biodiversity by Design - A Guide for Sustainable Communities
- TCPA 2007**, Climate Change – Adaptation by Design
- TCPA 2006**, Sustainable Energy by Design
- UWE 2003**, Shaping Neighbourhoods
- WAG 2002**, Planning Policy Wales
- WAG 2002**, TAN 12 Design
- WAG** (National Assembly for Wales) 2004, Starting to Live Differently
- WAG 2004 - 2007**, Sustainable Development Action Plan
- WAG 2005**, Creating Sustainable Places
- WAG 2006**, Ministerial Interim Planning Policy Statement (MIPPS) 01/2006 - Housing
- WAG 2007**, Ministerial Interim Planning Policy Statement (MIPPS) - Planning for Climate Change (DRAFT)
- WAG 2007**, TAN 18 Transport
- WDA 2003**, Biodiversity Guidelines
- WDA 2005**, 'The Welsh Development Agency Design Strategy'
- Welsh Local Government Association 2007**, Shaping the Way We Work, Live and Play: Practical guidance on delivering sustainable development through the planning system
- Welsh Office Circular 16/94**, 'Planning Out Crime'

Cardiff Council

Planning advice, Building Control advice, maps to download of Conservation Area Boundaries, advice on statutory considerations listed above. www.Cardiff.gov.uk

Development Control - planning permission, pre-application discussions, Conservation Area and Listed Building Consent
developmentcontrol@cardiff.gov.uk
 Tel: (029) 2087 1135

Building Control – Building Control regulations
buildingcontrol@cardiff.gov.uk
 Tel: (029) 2087 1363/1377/1153

LDP (Local Development Plan)
developmentplan@cardiff.gov.uk
 Tel: (029) 2087 3485

Transport, Infrastructure and Waste
highways@cardiff.gov.uk
 Tel: (029) 2078 5200

Tree Protection & Hedgerows
treeprotection@cardiff.gov.uk
 Tel: (029) 2087 3189

Sustainable Development
sustainabledevelopment@cardiff.gov.uk
 Tel: (029) 2087 3228

Conservation and Historic Buildings
conservation@cardiff.gov.uk
 Tel: (029) 2087 3485

Biodiversity
biodiversity@cardiff.gov.uk
 Tel: (029) 2087 3227

Other Organisations

Building for Life Wales – A showcase of the best contemporary housing schemes in Wales
www.buildingforlifewales.org
 Tel: (029) 2045 1964

BRE Wales – Provide best practice guidance on sustainable development in Wales.
www.bre.co.uk

CCW – Countryside Council for Wales provides advice on protected species and landscape planning.
 Countryside Council for Wales (CCW)
www.ccw.gov.uk
 Tel: 0845 1306229

Cadw – The Welsh Assembly Government's historic environment service
www.cadw.wales.gov.uk
cadw@wales.gsi.gov.uk
 Tel: (01443) 336000

DCFW - Design Commission for Wales – National organisation providing design review service

www.dcfw.org

Tel: (029) 2045 1964.

Energy Savings Trust – A non-profit organisation that promotes the sustainable and efficient use of energy in housing

www.energysavingtrust.org.uk

Environment Agency Wales – The leading public body for protecting and improving the environment in Wales.

www.environment-agency.gov.uk/regions/wales

SuDS Wales - A working party for Wales that includes representatives of organisations that encompass all aspects of stormwater management and drainage design

www.sudswales.com

The Landscape Institute - The Royal Chartered body for landscape architects

www.landscapeinstitute.org

Planning Portal – Government gateway to information on planning applications, appeals etc.

www.planningportal.gov.uk

RICS Wales – Royal Institute of Chartered Surveyors

Tel: 029 2022 4414

www.rics.org/wales

RSAW – Royal Society of Architects in Wales is the regional organisation of the Royal Institute of British Architects (RIBA)

Tel: (029) 2087 4753

www.architecture-wales.com

Secured by Design – Award scheme owned by the Association of Chief Police Officers Crime Prevention Initiatives (ACPO.CPI)

www.securedbydesign.com

Welsh Assembly Government - Sustainable Development - useful website for sustainable design links

new.wales.gov.uk/topics/sustainabledevelopment/masterplanlinks

Cardiff Planning Policy

1.) The City of Cardiff Local Plan was adopted in January 1996. Policy 11 (Design and aesthetic quality) of the adopted Local Plan states:

“All new development should be of a good design which has proper regard to the scale and character of the surrounding environment and does not adversely affect the aesthetic quality of the area.”

2.) The Mid Glamorgan County Structure Plan was adopted in September 1989. Policy H11 of the adopted Structure Plan states:

“Wherever possible existing residential areas characterised by high standards of privacy and spaciousness will be protected against over development and insensitive or inappropriate infilling.”

3.) The South Glamorgan (Cardiff Area) Replacement Structure Plan 1991 – 2011 was adopted in April 1997. Policy EV1 (Towards sustainable development) of the adopted Structure Plan states:

“Proposals which encourage sustainable practices and are consistent with other development plan policies will be favoured, including:

- i. Proposals which contribute to energy conservation or energy efficiency, waste reduction and recycling, improved pollution control, biodiversity and reduction of dependency on fossil fuels;
- ii. Proposals which help to reduce vehicle movements or which encourage the use of public transport, cycling and walking;
- iii. Proposals for which adequate utility services exist, are reasonably accessible, or can be readily and economically provided; and
- iv. The reclamation of derelict or degraded land for appropriate beneficial use.”

4.) The Cardiff Unitary Development Plan was placed on deposit in October 2003. Following introduction of the European SEA (Strategic Environmental Assessment) Directive in 2004 and subsequent updated guidance from the WAG on development planning, the Council has sought and obtained the agreement of the Assembly to cease preparation of the Cardiff UDP and commence preparation of a Local Development Plan.

5.) Guidance issued by the Welsh Assembly Government in respect of LDPs indicates that where a UDP has been put on deposit it may remain a consideration in development control decisions until such time as an LDP has been placed on deposit. Generally, the weight to be attached to policies in emerging UDPs depends on the stage of plan preparation, the degree of any conflict with adopted plans, and the number and nature of any objections and/or representations in support of policy.

6.) Policy 2.20 (Good Design) of the deposited Cardiff UDP states:

“All development will be required to demonstrate good design by:

- a). satisfactorily responding to local character and context;
- b). achieving a legible development which relates well to adjoining spaces and the public realm;
- c). providing a safe and accessible environment for everyone who might use or visit it;
- d). providing for the efficient use of resources and adaptability to changing requirements; and
- e). satisfactorily addressing issues of layout, density, scale, massing, height, detailing and landscaping”

7.) Representations were made at deposit, objecting to the above proposed policy.

CONSULTATION ON THE DRAFT SPG

- A.1** Consultation on this guidance was undertaken between 27th November 2007 and 7th January 2008. A press notice was placed in the South Wales Echo on Tuesday 27th November 2007 and notices and copies of the draft guidance were placed in all Cardiff Libraries and at City Hall and County Hall. The draft guidance was also published on the Council's website.
- A.2** Letters notifying that consultation was being undertaken on the draft guidance were sent to Cardiff Councillors, the Welsh Assembly Government, Community Councils in Cardiff and the following who are known to have a general interest in planning in Cardiff, or a potential interest in this guidance:

Architectural Liaison Officer (Police)
Arup
Atkins
Baker Associates
Barratt South Wales Ltd
Barton Willmore Planning Partnership
Beazer Homes
Bellway Homes (Wales Division) Ltd
Bovis Homes
Boyer Planning
CADW
Cadwyn Housing Association
Cardiff Chamber of Commerce
Cardiff Community Housing Association (CCHA)
Cardiff University
CDN Planning
Centre for Housing Management and Development
CGMS Consulting
Chartered Institute of Housing in Wales
Chichester Nunns Partnership
Communities Partnerships
Community Safety Design Officer
Countryside Council for Wales***
David McLean Homes
David Wilson Homes South West
Davis Langdon and Everest
Dept for E&T, Welsh Assembly Govt
Design Commission for Wales
Development Planning Partnership
Development, Land & Plannig Consultants Ltd
DLP Consultants
DTB Design
DTZ Pida Consulting
Eastlake Ltd
Environment Agency Wales***
Enviros Consultancy
Friends of the Earth (Cymru)
Fulfords Land & Planning
GL Hearn Planning
Glamorgan and Gwent Housing Association
GMA Planning
Grosvenor Waterside

GVA Grimley
Hafod Housing Association Limited / Hafod Care Association Limited
Halcrow
Harmers Ltd
Hepher Dixon
Hodge & Co Property Holdings Ltd
Home Builders Federation
Housing Directorate
Hyland Edgar Driver
John Robinson Planning & Design
Kelly Taylor & Associates
Levvel Ltd
Lovell Partnership
Macob Construction Ltd
Madley Construction
Mason Richards Planning
McCarthy and Stone (Western Region)
Meadgate
Morgan Cole
Nathaniel Lichfield & Partners
National Federation of Builders
Northgate Info Solutions,
Novell Tullet
Persimmon Homes (Wales) Ltd
Planning Officers' Society for Wales
Redrow Homes (South Wales) Ltd
RICS Wales
Robert Turley Associates
Royal Society of Architects in Wales
RPS Group plc
Scott Wilson
SecondSite Property
Stride Treglown Town Planning
Taff Housing Association
Tanner & Tilley
Taylor Wimpey Homes
The Design Group 3
The Planning Bureau Ltd
Town Planning & Development
United Welsh Housing Association
Wales & West Housing Association
Welsh Federation of Housing Associations
Welsh Tenants Federation Ltd
Westbury Homes (Holdings) Ltd
White Young Green Planning
Wilcon
WS Atkins Planning Consultants
Wyn Thomas Gordon Lewis Limited

- A.3** Comments specifically or generally relevant to the draft guidance were received from the above consultees indicated *** and from: Tongwynlais Community Council and an individual member of the public.

For more information please contact

**The Strategic Planning Manager
Strategic Planning & Environment
Cardiff Council
County Hall
Atlantic Wharf
Cardiff
CF10 4UW**

Email: developmentplan@cardiff.gov.uk