The Council is committed to the delivery of high quality sustainable housing. This commitment is reflected in Sandwell’s Scorecard, and this Revised Residential Design Guide will ensure that housing and residential environments in Sandwell are designed to meet the needs and aspirations of the local community and provide clear guidance to the development industry when designing and delivering new housing sites in the borough.

Councillor Ian Jones
Cabinet Member for Jobs and Economy
Foreword

Contents of Document

Background

Aims of Document

What is Good Design?
Why do we need to achieve Good Design?
How do we achieve Good Design?

The Challenge

Policy Background
National Planning Policy Framework
The Black Country Core Strategy
Sandwell Sites Allocation and Delivery Document
Building for Life
Design and Access Statements
Planning Applications
Development Agency Approach
Design Review

Useful Contact Numbers

Residential Design Policy

1. Integrating into the Neighbourhood
   1.1 Connections
   1.2 Facilities and Services
   1.3 Public Transport
   1.4 Meeting Local Housing Requirements

2. Creating a Place
   2.1 Character
   2.2 Working with the Site and its Context
   2.3 Creating Well Defined Streets and Spaces
   2.4 Easy to Find your Way Around
3. **Street and Home**

3.1 **Streets for All**
3.2 **Safety and Security**
3.3 **Car Parking**
   - Family Homes
   - Apartments
   - Nursing/Care Homes & Homes in Multiple Occupancy
3.4 **Public and Private Spaces**
   - Public Space
   - Private Space
   - Space Standards & Codes of Good Practice
   - External Space Standards
   - Internal Space Standards
3.5 **External Storage and Amenity Space**
   - Waste Management
   - Waste Storage Requirements
   - Access and Amenity
   - Family Dwellings
   - Apartments
   - Dwellings in Multiple Occupancy, Retrofit to Apartments and Multiple Occupancy
   - Waste Management Plans

**References**

**Appendices**

1. - **Homes in Multiple Occupancy Standards** published by Sandwell Housing
2. - **Identifying Local Character Matrix**
3. - **Developers Guide to the Design of New Streets**
4. - **Codes of Good Practice for Tree Planting**
Sandwell Council is committed to the creation of sustainable, high quality environments in which people are proud to live, work and play. There are two particular goals that are relevant to this document:

Reverse the decline in the Borough’s population by providing an appropriate range of good quality housing that meets the needs of communities.

Promote excellence in the design of buildings and open spaces by ensuring that they are provided to a high quality and constructed of good quality materials and provide sustainable living environments.

The Residential Design Guide was originally adopted as Supplementary Planning Guidance (SPG) in 2004 and supporting information relating to Residential Intensification was adopted in 2007 as a Supplementary Planning Document (SPD). Both were supplementary to the Sandwell Unitary Development Plan (UDP) adopted in 2004. Design guidance in both documents reflected the design approach taken in Planning Policy Guidance Notes 1 and 3.

Due to considerable policy changes including the adoption of new and revised national, strategic and local policy in 2011 and 2012 it is necessary to review the previously Adopted Residential Design Guide.

In March 2012 the publication of the National Planning Policy Framework (NPPF) replaced a number of Planning Policy Guidance Notes including 1 and 3. Earlier in 2011 the Black Country Core Strategy was adopted as a strategic policy document which superseded parts of the adopted UDP. However the UDP was then replaced by the Sandwell Site Allocations and Delivery Development Plan Document (SAD DPD) which was adopted in December 2012. Therefore the Adopted Revised Residential Design Guidance is now supplementary to the Black Country Core Strategy 2011 and the Sandwell SAD DPD, as well as nationally adopted planning policy.

In addition to this the Council adopted Building for Life (BfL), as a Supplementary Planning Policy Document (SPD) in July 2011, as an evaluation tool for measuring the quality of new and existing housing developments at pre- and post-application stage. Changes nationally in September 2012, to the structure of BfL have been embraced by the Council and the Revised Residential Design Guide has been structured to make reference to the latest BfL12 criteria to assist developers and officers in cross-referencing relevant design policy and to provide consistency when assessing development proposals.

Lastly, for the sake of consistency, the previously Adopted Residential Design Guide (2004) and Residential Intensification Paper (2007) have been updated and combined into the now Adopted Revised Residential Design Guide.

This document provides detailed design guidance for all aspects of new residential development. It aims to raise quality and ensure that residential areas are attractive, integrated, accessible, flexible, comfortable, safe and identifiable for those people who live in the Borough as well as improve the perception of housing in Sandwell. The Guide is also designed as
a working document that can be used by Council officers, and advise developers and others who are involved with the residential environment and development process.

The Revised Document was approved by the Cabinet Member for Jobs and Economy in August 2013 following an extensive period of public consultation and any necessary amendments being carried out in accordance with the statutory planning process. The document was formally adopted as supplementary planning policy by the Council in January 2014.
The aim of this Supplementary Planning Document (SPD) is to provide clear design guidance for achieving residential development quality within the Borough so that attractive, high-quality, sustainable living environments are created, thereby improving the desirability of the borough as a place to live and also improve places for new and existing residents.

To achieve good quality places and well-designed homes the SPD draws on sound urban design principles to inform policy on different aspects of residential development.

Policies offer guidance in good design practice and how to approach the design and layout of residential development proposals within Sandwell. The list is not exhaustive and does not claim to be the only correct approach. Development proposals that meet the spirit of the guidance will be received positively.

**What is good design?**

Good design goes beyond what a building looks like; it is about achieving a feel good factor and sense of well-being in the space around them. Key objectives of good design are defined as:

- **Aesthetics**
  - Personal choice - safety and security
  - Physical and mental health
  - Environmental sustainability
  - Community

**Why do we need to achieve good design?**

Simply because we need to make better places. The quality of life for people today and future generations of Sandwell, depends on the sustainability of housing and environments being created, how we live and function in them and how they are perceived over time.

**How do we achieve good design?**

By taking into account general principles of urban design which ensure that new developments are well-used and well-loved. To do this they must be safe and comfortable to live in, offer a variety of experiences and be attractive to look at:

The key objectives are:

- to use land more efficiently for new homes,
- build good quality housing set in attractive environments,
- connect and integrate designs physically and visually to the local context and facilities,
- respect the local character and landscape when designing development,
- ensure that housing designs are flexible to meet changing demands during their lifetime,
- the delivery of good quality sustainable external spaces.
High quality award winning, mixed tenure homes at Churchfields, West Bromwich.
David Wilson Homes
Sandwell is a diverse urban area with a long history tied into the industrial revolution. Historically this created large areas of high density housing close to places of employment. Much of the housing built at this time was terraced housing built in a traditional block design using a grid system.

In the post war years the trend was to develop at lower densities mainly due to an increase in wealth and car ownership which, coupled with an expansion of public transport facilities meant that people no longer had to live close to their place of work. Residential areas became disconnected from town centres and industrial areas and this had an impact on how efficiently land was used and on the demise of local character. More recent trends to increase housing density has helped to regenerate areas but also created problems of over intensification and poor integration. Too many apartments in some locations have not proved sustainable or popular in areas of the borough where local character has been compromised.

Although considerable improvement is evident in the quality of residential design since the adoption of Residential Design Guidance in 2004, there is still room for improvement particularly where little design thought is given to integrating new development proposals with the existing context and fail to respect the positive characteristics of established areas. New homes and residential layouts must be sustainable in terms of their construction, quality and future robustness as living environments that are well maintained.

Serious pressure will continue for new homes to be built and the clear message from Government guidance is to encourage the better use of land and buildings in urban areas. We need to use land more efficiently if enough homes are to be provided to meet future demand particularly in established areas. We must also avoid past mistakes that are linked to poor housing quality. The Council will take a positive approach in working with developers to bring forward sites for new housing development, but will resist those proposals that make poor use of sites or where the success of residential environments is uncertain due to site constraints. The Council will also seek to protect the positive characteristics of established areas for example; in established suburbs over intensification and ‘garden grabbing’ will be resisted where considered inappropriate and contrary to local character.

The Council will expect new housing layouts to respect and integrate with existing layouts and “fit in” with individual localities. It will also expect that a range of new homes and house types are provided, particularly on major housing developments. House designs should offer the breadth, range and quality of accommodation that is needed to attract people to live in the borough, support the local economy and encourage a long term commitment to the area. New homes must also be built with good quality materials, meet adopted internal space standards and provide adequate defensible space and amenity for residents. The quality, design and the likely future success of external spaces as living environments will also be considered carefully.

This document seeks the delivery of good quality housing in places where people are proud to live.
Policy Background

National Planning Policy Framework

The National Planning Policy Framework (NPPF) published in March 2012 sets out to simplify the planning system and supercedes National Planning Policy Statements (PPS), including 1 and 3 which related to Delivering Sustainable Development and Housing. The NPPF however does strengthen Government commitment to delivering sustainable development through the planning system as well as attaching great importance to the design of the built environment. It also acknowledges that good design is a key aspect of sustainable development and is indivisible from good planning, and should contribute positively to making places better for people. It also supports the adoption of robust policy at a local level that sets out the objectives for achieving sustainable, high quality inclusive housing design. Furthermore that planning permission should be resisted for development of poor design that fails to take the opportunity available for improving the character and quality of an area and the way it functions.

The Black Country Core Strategy and Sandwell Site Allocations and Delivery Plan Document

Encourage good design in new housing and residential environments which will improve the quality of life experiences for local communities is an overarching principle linking the Revised Residential Design Guide to The Black Country Core Strategy and Sandwell Site Allocations Document.

The issue of achieving good design has to be addressed, not only as part of the Strategic Policy base and Development Plan, but also in the subsequent decision-making process. Generic urban design policies are therefore included in both the Core Strategy and SAD/DPD. The following main policies, although not exhaustive, establish the broad principles for achieving good design and satisfy the Council’s objectives for encouraging good quality homes to be developed in the borough, and provide a basis for the Revised Residential Design Guide.

Black Country Core Strategy

Policy CSP4 : Place Making
Policy ENV2 : Historic Character and Local Distinctiveness
Policy ENV3 : Design Quality
Policy ENV4 : Canals
Policy ENV5 : Flood Risk, Sustainable Drainage Systems and Urban Heat Island
Policy ENV6 : Open Space, Sport and Recreation
Policy ENV7 : Renewable Energy
Policy EMPS : Improving Access to the Labour Market
Policy WM5 : Resource Management and New Development
Sandwell Site Allocations and Delivery Development Plan Document (superseded the Sandwell Unitary Development Plan in 2012)

Policy SAD EOS 1 - The Green Space Hierarchy
Policy SAD EOS 4 - Community Open Space
Policy SAD EOS 9 - Urban Design Principles
Policy SAD EOS10 - Design Quality & Environmental Standards
Policy SAD EMP2 - Training and Recruitment

The above policies can be viewed in full by visiting the following links.

http://blackcountrycorestrategy.dudley.gov.uk/

Building for Life

Building for Life (BfL) has already been adopted as supplementary planning policy already by the LPA and recent changes to the structure and scoring for BfL in the form of BfL12 have been embraced accordingly. Central Government supports BfL12 and recognises that what we build is just as important as how many homes we build and attaches great importance to the design of the built environment and how it is perceived by all users. Changes to BfL12 have been strongly aligned to the National Planning Policy Framework which is demonstrated in the table below.

<table>
<thead>
<tr>
<th>NPPF</th>
<th>Generally :Para 63</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrating into the neighbourhood</strong></td>
<td><strong>NPPF Para.</strong></td>
</tr>
<tr>
<td>1. Connections</td>
<td>9,41,61,75</td>
</tr>
<tr>
<td>2. Facilities and services</td>
<td>38,58,70,73</td>
</tr>
<tr>
<td>3. Public transport</td>
<td>9,17,35</td>
</tr>
<tr>
<td>4. Meeting local housing requirements</td>
<td>9,47,50</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Therefore it is considered appropriate to structure the Revised Residential Design Guide so that adopted policy responds directly to the BfL12 criteria and structure. This will assist developers to link adopted policy to the aims of BfL12 so that design solutions for proposed housing layouts are better informed. This approach will ensure consistency in applying residential design policy and provide a basis for negotiation in pre-application discussions as well as a structure for the applicant to write supporting Design & Access Statements on major development proposals.

Applicants must clearly demonstrate the rationale behind their scoring for schemes in line with the recommendations of BfL12. Assessments will be appraised by the Planning Authority on all major schemes (10 dwellings or more) at pre-application, planning application and post development stage.

This combined approach will ensure consistency in how proposals are assessed by the Council and demonstrate how schemes have been improved to overcome any constraints and concerns expressed by the Planning Authority during the pre-application debate with regard to design quality. This will help reduce the need for protracted negotiation at the planning application stage on design matters and help to speed up the application process.

With regard to scoring schemes against the BfL12 criteria the Planning Authority will continue to reject poor design and those schemes that are contrary to adopted policy as well as those schemes that are considered to respond poorly to the BfL12 objectives for well-designed homes and neighbourhoods. BfL12 assessments will be carried out using the recommended traffic signal approach and the expectation will be that as many ‘green signals’ will be reached as possible and improve on amber scores. Schemes will be rejected where the Planning Authority flag any ‘red signals’ when scoring assessments.

Building for Life12 is published by the Building for Life Partnership (Cabe at the Design Council, Design for Homes and the Home Builders Federation) with the assistance of Nottingham Trent University.

A copy of the document can be found at:


or on the Council’s Web Page at


Design & Access Statements

A Design and Access Statement must be submitted with planning applications for all new residential proposals and should:

- explain how the development will meet the local authority’s urban design and planning policy objectives.
explain the design principles and design concept behind the development and demonstrate how these principles are reflected within the developments layout, density, scale, visual appearance and landscape;

explain how the development relates to the wider area, for example, through a site appraisal;

explain how the development has been designed to overcome safety and security concerns and meet the needs of future occupiers.

The Design and Access Statement should be illustrated where appropriate by plans and elevations, photographs and other illustrations such as perspective or axonometric. All drawings should be accurately drawn to a recognisable metric scale: coloured drawings are more informative.

Planning applications will not be accepted which are not supported by a Design and Access Statement where considered necessary. Guidance on writing statements can be found at:

http://www.planningportal.gov.uk/planning/applications/howtoapply/whattosubmit/designaccess

The type and amount of information supplied will depend upon the scale of development. For example where one building is proposed, photographs showing the context of the site and the proposed building's relationship to neighbouring properties may be sufficient. However, on large scale development, where more than ten units are proposed, it is important to supply sufficient graphical information to enable an accurate assessment to be made of how the proposal fits in and connects to the surrounding street network, both visually and physically. Axonometric or 3D graphic presentations will also be extremely helpful when interpreting major schemes. Where there are topographical issues to understand, cross-section and levels details must be supplied.

Planning Applications

The Council supports the concept of discussion prior to any form of planning application being submitted, commonly called ‘Pre-Application Discussions’.

Early pre-application discussion with Sandwell’s Planning Division is recommended particularly on larger schemes and where it is considered necessary to carry out a Building for Life12 Assessment. This assists the planning application process by clarifying beforehand the suitability of the proposal and what the Council’s expectations are in terms of overall design quality.

The level of supporting design detail submitted in planning applications should be sufficient and detailed enough to reduce the need for planning conditions to be added to decisions.
Where outline applications are submitted, particularly for major residential schemes, there is an expectation that the level of supporting information submitted will be sufficient to establish that housing layouts, projected housing numbers and plot structures work spatially, and if delivered will achieve a good quality sustainable living environment. Generally, the level of supporting information required will depend on the complexity of individual schemes and advice can be obtained during pre-application discussion or by contacting the Planning Authority. Please refer to the contact list on the following page.

All applications will be considered on the basis of scale and density, access and parking, sustainability, the relationship with the character and quality of the local environment as well as security and safety.

**Development Agency Approach**

In accordance with recommendations in the National Planning Policy Framework, the Local Planning Authority (LPA) is promoting a Development Agency Approach to help stimulate regeneration opportunities across the borough. This approach is designed to invite Landowners and Developers to enter into early discussions with in-house professionals from the LPA to share views, aspirations and discuss the appropriateness of proposals for site development at an early stage.

**Design Review**

The LPA will also actively encourage Design Review engagement both in-house and externally through Midland Architecture and the Designed Environment (MADE) and The Design Council/Commission for Architecture in the Built Environment (CABE) where schemes are considered to be of major, strategic and national importance, to ensure that high standards of design are achieved.

Design Review is recommended as early as possible in the design stage. Further information and advice can be obtained by contacting a member of the **Urban Design Team on 0121 569 4055**.
Useful Contact Numbers

Contact Telephone Numbers within the Planning and Regeneration Division:

Development Management 0121 569 4054/4055
Planning Policy 0121 569 4195
Urban Design 0121 569 4087/4022
Conservation 0121 569 4033
Tree Officer 0121 569 4054/4055

Planning Application and Fee Forms are available by telephoning:
0121 569 4054 or 4055
or by writing to:
Planning and Regeneration,
Oldbury Council House,
Freeth Street,
Oldbury. B69 3DE.

Other useful telephone numbers within the Council:

Highway Engineers 0845 3521879
Building Consultancy 0121 569 4055
Waste Management 0121 569 6659
Community Safety Development Officer 0121 569 3892

Contacts outside the Council who can offer detailed advice on safety and security aspects of design prior to the deposit of planning applications:

West Midlands Police - 0845 113 5000
Architectural Liaison Officer Ext 7911 6574
West Midlands Fire Service 0121 544 7209

Contact regarding SPD:
Coleen Haycock 0121 569 4087
or coleen_haycock@sandwell.gov.uk
The Lyng, West Bromwich - award winning new homes.
The Council working in partnership with Barratt Homes (working with IDPartnership).
The following policy is structured in three main sections that reflect the Building for Life12 structure. The policy groupings are not exhaustive and there is some cross-referencing between them to encourage a comprehensive design approach to the delivery of new residential environments.

1. Integration into the Neighbourhood

2. Creating a Place

3. Street and Home
New homes, Eastern Gateway, West Bromwich. Accord Housing.
I. Integration into the Neighbourhood

Well-connected places and how new housing layouts merge with existing are generally the most successful and sustainable places to live. The design and positioning of new streets, the quality and convenience of pedestrian and cycle access to local facilities and public transport routes are all essential considerations when designing new housing layouts. Therefore applicants should demonstrate that the following policies have been considered in emerging designs.

1.1 Connections

a. New housing developments will be integrated with surrounding areas and not be developed in isolation of local facilities. Careful consideration of how safe, easy and direct access is achieved to public transport links is essential.

b. New roads and footways must be designed so that they connect to the surrounding street network safely and conveniently and be easy to understand in terms of way finding.

c. Housing layouts should not be designed in isolation of their surroundings and established communities; they should be integrated both visually and physically and designs should consider local community views.

1.2 Facilities and Services

a. Access to local facilities such as shopping, health care and schools facilities as well as public transport connections are important considerations that must influence the design layout and location of new housing as well as the density and variety of house typology proposed.

b. Currently new housing developments will be expected to contribute financially to the amount and ongoing maintenance of open spaces within the borough. This will be either through conditioning new provision on larger sites or by means of securing a commuted sum via a Section 106 Agreement, to improve the quality of existing spaces that are within easy walking distance of the proposed development. However the use of Section 106 Agreements as a means of providing and improving open spaces will be replaced by the Community Infrastructure Levy (CIL) on its adoption which is anticipated in July 2014.

c. The ongoing management and maintenance of external spaces is of key importance. Agreement must be reached during the determination period whether external public spaces will be adopted by the Council or whether private management is necessary. In the case of private management it will be necessary to provide a management plan which should include a breakdown of the type of maintenance required, the frequency of carrying
work out and clarification of the funding mechanism to ensure that the work is carried out in perpetuity for the life of the development.

d. Variety in the type of open spaces provided will be encouraged to add visual and sensory interest to places that meet the various leisure and play requirements associated with new housing. Where it is the expectation that spaces will be adopted by the Council the design and maintenance requirements of spaces and equipment will need to be agreed prior to implementation.

e. Where play facilities are provided, consideration must be given to meeting the demands of various age ranges. This will be dependent on the type of development and local need in the area as well as the sensitivity of the location and proximity of neighbouring homes.

Open space and play space policy is now covered by the Black Country Core Strategy 2011 DEL1 Infrastructure Provision, the Sandwell Planning Obligations SPD 2011, and Policies EOS1 & EOS4 of the Site Allocations and Delivery DPD 2012.

1.3 Public Transport

a. In areas that are not well served by public transport or where unacceptable walking distances are being imposed, early discussions should be held with Centro to assess the need to improve services and access to them to serve new housing layouts, particularly where major new settlements are proposed.

b. Particular attention to the convenience of public transport links needs to be given where higher density design solutions are being considered and the amount of car parking provided is reduced. As a rule of thumb walking distances to public transport connections should be no greater than 320 to 400 metres in higher density areas to public transport connections or 560 to 700 metres in lower density locations depending on topography and convenience of routes.

1.4 Meeting Local Housing Requirements

a. New housing development must be designed to make a positive contribution to the Borough of Sandwell and address the needs of all communities and family size. Major housing developments (10 or more units refer to policy 2.1.g) must provide a mix of housing and accommodation size so that they provide a sustainable living environment.

b. Consideration must be given to the breadth, range and quality of accommodation that is needed to attract a variety of family units. Accommodation that can adapt to social and economic change over time will be more successful in providing for the diverse cultural, social and physical needs of occupiers. It is also
important that the size, layout and quality of new homes provide attractive living areas to retain more affluent groups of society, for the purposes of supporting the local economy, the regeneration of the borough and a long-term commitment to the area.

c. A mixture of occupancies must be encouraged. Such design solutions assist the development of community spirit, which in turn makes places appear more cared for and secure as they are likely to be occupied over longer periods of the day to meet differing lifestyles.

d. Where affordable housing is included within housing layouts it should not be grouped together or segregated from the wider development, and ideally pepper-potted across sites where possible. Neither should affordable housing be isolated or obvious because of its design. Dwellings must be tenure blind and consistent with wider development in terms of architectural coding and the quality and variety of materials proposed.

Flexibility - Meeting Changing Needs and Building Conversion

e. The Council has adopted the Lifetime Homes standard, and it must be applied to all proposals for affordable housing development on Council owned land. The basic principle behind the standard is that homes during their lifetime, will provide for the changing needs of a person and their family, as well as changes in occupier.

f. The Council has adopted the Code for Sustainable Homes Level 3 and there is a minimum requirement to achieve this in all new homes constructed in the borough or nationally adopted minimal should this be greater at the time of planning consent being granted. (BCCS Policy ENV3).

g. All residential developments of 10 units or more gross (whether new build or conversion) must incorporate generation of energy from renewable sources sufficient to off-set at least 10% of the estimated residual energy demand of the development on completion. (BCCS Policy ENV7).
Designing buildings to adapt over time according to the changing needs of the market and occupiers is a factor to consider in certain locations where mixed-use developments may be appropriate.

The ability to re-use buildings is far more sustainable and a solution for meeting the growing demand for housing, for example in town centres where introducing mixed-uses or residential conversion are an effective way to regenerate buildings and encouraging residential uses back into town centres. Living above ground floor compatible retail/service uses is a good way of promoting prolonged hours of activity in areas.

When considering the reuse of buildings, each proposal will be judged on its own merits. Where there is conflict between principles of achieving natural surveillance and defining public and private space the aim will be to achieve a balance between well designed living accommodation and high quality external environments. The following good practice guidance must also be considered.

- Upper floor conversions must consider the installation of a separate entrance at ground floor level, as this is a safety and security consideration.
- Include measures within the design to reduce the impact of noise and odours from ground floor uses in mixed use proposals.
- Consider the internal planning of residential accommodation to reduce noise levels.
- Maintain access to natural light in to upper floor accommodation and a direct outlook for primary habitable rooms where residential conversion is proposed.
- Vents and ducts from pollution sources at lower levels need to be designed to have the least possible impact on residential accommodation and they must also be kept clear of primary frontages.

The reuse of buildings will be encouraged by the Council where it feels that their loss will affect the character of an area in terms of townscape value and local identity.

Plot structures for new homes particularly for larger families must be designed to enable future expansion to take place to meet changing needs and the personalisation of space. It is also important to ensure that the internal living space of...
new build and conversions is usable and flexible over time. Habitable rooms shown on plans must demonstrate that they can accommodate furniture and circulation space. Internal and external space standards in new homes and conversions must comply with the Council’s internal space standards as a minimum requirement. (Refer to Policy 3.4.4)

Family Dwellings

m. Continual runs of the same house type particularly terraced designs must be avoided so that visual monotony and restricted rear servicing does not occur.

n. Care must be taken to ensure that rear access for servicing is practical for all house typologies, so that rear bin storage as well as access to rear parking courts where provided can be conveniently accessed.

o. Design the set back of new housing to respect established building lines in existing streets where they adjoin or where strong design codes exist within the established street scene.
p. In new layouts housing should have a minimum set back of 1 m for two storey designs. This may need to be increased where 2.5 and 3 storey designs are proposed. This is to ensure that defensible space is provided for the occupiers of the dwelling.

q. Similarly in situations where housing has a close relationship with the street ensure that the internal layout responds positively to the street frontage with active rooms but ensure that internal defensible space is provided for occupiers so that their privacy is maintained. Primary active rooms include lounge, dining areas and bedrooms. Kitchen windows are considered secondary as they do not always fit into the established design code of existing street scenes. Furthermore, they are not always considered to present extended hours of activity internally, to ensure continual natural surveillance is provided to the street.

r. External layouts for house designs, as well as apartments must clearly define public and private space around built form as well as provide adequate levels of defensible space to protect the privacy of internal ground floor layouts from street frontages, car parking layouts, amenity space, pedestrian links and external storage.

s. A clear minimum width of at least 1 metre must be maintained between opposing gable walls whether new or adjacent to existing. This is to ensure that rear servicing is possible as well as easy construction and future ongoing maintenance of the building.

Apartments

t. Where apartments are provided the appropriate levels of private usable amenity space for residents will be expected. As a rule of thumb this should be no less than 10 sq.m. per unit. Amenity space must be well designed and of good quality, it should also be convenient for residents to use. It must not be made up of left over spaces or landscape buffer areas within the site. In certain locations the creative use of space will be accepted as an alternative, such as full balcony, decked or roof garden areas. The requirement for private amenity space will be in addition to other requirements for community open space identified in other existing adopted Council policy documents.

u. Pedestrian entrance points into apartment designs must be legible from primary street frontages and connections into the building designed so that they are safe and convenient.
v. Internal layouts and circulation spaces within apartment blocks must be designed to foster neighbourliness and design out the opportunity for crime. Large lengths of corridor runs and entrance arrangements that serve too many units will be resisted.

w. The internal layout of apartments must include internal storage provision where at all possible for bin and cycle storage in preference to external storage. In both cases the size and external construction of storage and collection areas will need to meet the Council’s standards contained in policy 3.5.e.

Personalisation and Domestic Scale Extensions

x. Generally personalisation only takes place in spaces which people control. Problems can occur where personal choice erodes the quality of the public realm and disrupts the visual quality of the street, for example the quality of domestic extensions and attempts to secure personal space.

y. Poor quality domestic extensions which require planning consent that do not fit in visually or are clearly out of keeping with their surroundings, by virtue of their scale, architectural design, proposed materials and impact on neighbouring properties, will be resisted. For example;

- Extensions must be in proportion to the scale of the existing dwelling and street scene.
- The over intensification of individual dwellings where it is proposed to extend them to a scale that is considered unreasonable will be resisted. For example where proposals impact unduly on neighbouring properties or street scene, where the amount of remaining private amenity or defensible space could be significantly reduced, or where sufficient space for car parking demand could not be provided within plot.
- The appearance and size of roof designs, windows, doors and architectural detailing must respect established design codes.
- Separation distances between opposing gable walls must be maintained to avoid creating a terracing effect, where opportunities for rear servicing become restricted or where access to natural light cannot be maintained.
Dormer extensions that require planning consent will need to be designed so that their scale and appearance fits into the architectural language of the original dwelling, neighbouring properties and street scene. Where living space is introduced into roof spaces, whether new build or conversion, main living room areas must have a direct outlook onto external outdoor space.

Proposals to increase the internal capacity of dwellings to provide additional bedroom spaces, must demonstrate that there is scope within the plot structure to cater for increased off-street car parking demand, without diminishing the quality of front garden areas. Hard surfaced areas must not exceed 70% of the exposed garden frontage. Additionally safe pedestrian movement into the dwelling and connections to the public footway must be maintained.

Good Example of frontage design, deep lounge window fenestration overlooks the street and the garden has a clear boundary. Note also the removal of the service box of the facade of the dwelling which is hidden behind the boundary wall.

Bad response to the street frontage resulting in a poor quality space, lack of natural surveillance and legibility.

The lack of definition to front garden area, and exposed blank gable erodes the quality of the streetscene and impacts on the internal defensible space.
The conversion of garages into living accommodation where planning consent is required will be resisted, where it is considered that the transition distorts the architectural design of the property and/or street scene. Where the loss of off-street car parking provision cannot be reinstated within the plot, also where opportunities for safe and convenient off-street car parking provision is limited, or would result in diminishing the quality of the public realm and impact on pedestrian movement.

The privatisation of space where planning consent is required will be unacceptable where the design of proposed boundary treatments have a detrimental visual impact on the street because of their height and/or design.

Residential Annexes

A residential annex, sometimes referred to as “granny flat” is accommodation that is considered ancillary to the main dwelling within a residential curtilage. Where planning consent is required it is unlikely that it will be granted where development results in the creation of a separate dwelling, which in normal policy circumstances would be unacceptable.

When determining proposals for a residential annex the Council will expect development to –

- be subservient/subordinate in design to the principal dwelling;
- have a functional link with the principal dwelling;
- be in the same ownership as the principal dwelling;
- comply with the Council’s spatial design standards;
- have no demarcation boundaries to separate it from the principal plot;
- share its vehicle access with the principal dwelling, which should be able to accommodate the potential increased parking demand;
- be designed to enable conversion to become an integral part of the principal dwelling at a later date;

Where planning consent is granted conditions will be added to prevent the future market sale of annex development.

Houses in Multiple Occupancy

Where planning consent is required to convert existing buildings or develop new homes in multiple occupancy consideration must be given to the following policies.

Refer also to Appendix 1 Homes in Multiple Occupancy Standards published by Sandwell Council.
bb. Main entrance points into the building must face onto the primary street frontage. Entrance points must be clearly identifiable and provide a safe and convenient route for residents and visitors to access the building.

cc. The location of car parking must not be prioritised in front of primary building frontages.

dd. External private amenity space will be expected to relate to built form in terms of its accessibility and usability.

ee. Access to natural light into living areas must be achieved in building conversion, extension or in new build schemes.

ff. External space standards adopted by the Council will need to be achieved, in terms of access, car parking, private amenity, external storage and servicing.

gg. Extensions to existing buildings will need to be proportionate to the scale and massing of existing built form and overall plot size. The impact on existing properties as well as the existing internal layout of the dwelling will need to be acceptable as will any proposed reduction of the established level of external amenity for residents.

More Information can be found at:
www.homestamp.com/HMO and
www.idea.gov.uk/idk/core/page.do?pageId=24317934

Other contacts:
Sandwell Council Private Sector Housing
Telephone Number: 0121 569 5232

Nursing, Care and Extra Care Homes

The Care Quality Commission carry out the regulatory function and licensing of each Care Home with increased emphasis placed with care providers to administer suitable accommodation standards.

www.cqc.org.uk/public/what-are-standards/government-standards

hh. Applications for new build accommodation as well as the conversion and enlargement of existing buildings will be carefully considered to ensure that built form is complementary to its surroundings and fits into the local context in terms of scale, massing and appearance.

ii. Main entrance points into the building must be legible and usable from the primary street frontage.

jj. The location of car parking must not be prioritised in front of primary building frontages.
kk. Adequate levels of external private amenity space will be expected in new build and relate to built form in terms of its usability and outlook. Proposals to extend existing care homes must not be to the detriment of adequate levels of existing private amenity or usability of it.

ll. Main living areas must have access to natural light and outlook.

mm. External space standards will need to be respected, between new and existing built form, access, car parking, external storage and servicing. (Refer to Policy 3.4.t)

Ensure that buildings are legible from the street and that pedestrian entrance points into them are clearly visible from the street, to assist direct and convenient access by foot.
David Wilson Homes residential development, Churchfields, West Bromwich
2. Creating a Place

Sometimes particular qualities give an area a recognisable character, such as the use of local or particular material palette, architectural detail or a specific building formation or boundary detail. These details are often referred to as design codes. Other things also contribute to how places are perceived such as access to open spaces and playing facilities, water courses or views to memorable landmark features or local focal points, in the form of built form or landscape.

See Appendix 2 Identifying Local Character Matrix

2.1 Character

a. Not all places are the same and care must be taken to build onto positive distinctiveness where it exists and develop opportunities to foster place identity where it is lacking.

b. Identifiable characteristics can be considered at a strategic level such as housing density, access and the quality of residential areas, right down to detailed matters such as the layout of streets and how established built form responds in terms of shape, style, colour, window design, boundary treatments, . All matters need to be considered carefully when designing new or adding to existing residential environments. Design and Access Statements must set out how the design, of new housing proposals have been influenced.

c. Where major new development proposals are being considered it is important to create character areas within the layout to assist place creation and identity.

d. Standard house designs and nondescript layouts must be avoided as well as using the excuse that there is a lack of distinct local character, to roll out more placeless development. Care must be taken to adapt the elevations of standard house types and standard approaches to highway design to complement or develop local character. Quality and detail matters and new development proposals will be measured on these merits.
e. People should be able to understand places and find their way around through visual connection and place perception. New development proposals must relate to the spaces around them three dimensionally and allow the user to recognise and understand the activities that take place within and outside them. How comfortable and safe external spaces are to use is also an essential ingredient of good design and place creation.

f. Existing recognisable landmark buildings, landscape and boundaries must be celebrated within new housing layouts. New build landmark opportunities are limited. Where they do exist if is often where sites have strategic locations, key road or open spaces frontages and gateway locations. These opportunities must be embraced in new design proposals. More generally opportunities must be taken up to promote local focal points at important corner locations and where strong visual links are created in or by the new housing layout.

Defining Development Layouts

g. For the purposes of clarity and to assist in the determination of planning applications the Local Planning Authority has categorised the following scale and types of development layouts.

- **Major Development** consists of 10 or more dwellings.
- **Minor Development** consists of less than 10 dwellings.

Infill Layouts

h. Infill development is where new housing is proposed within the fixed perimeters of existing boundaries and road frontages. This can be either on a major or minor scale on vacant sites. The benefits are that the new layouts can better integrate with their surroundings and existing street frontages with new connections and built form. Proposals will be considered on their individual merit and layouts will be expected to deliver sustainable housing...
layouts that integrate with and contribute positively to the surrounding context.

**Back Land Development**

i. Back land development is where a new access is created between existing buildings on an established road frontage and where no new built form is visible on the street frontage. Access is usually achieved through the removal of one or more existing frontage properties and often includes the proposed development of established garden areas. Proposals will be considered on their individual merit but careful consideration will be given to the impact on local context, established housing density, landscape and the loss of established garden areas in suburban locations where original plot structures are intact. Concerns will also exist where new built form has little or no visual connection to the existing street network and where spatially the quality of the layout is challenged.

**Tandem Development**

j. Tandem development is defined as one or more houses located directly behind an existing building on an existing road frontage, which are designed to share the original plot structure and access point of the existing building. This form of development is generally unacceptable and is likely to be resisted.

**Individual Plot Sub Division**

k. The sub-division of established plots to create additional building plots facing onto a shared street frontage will be resisted where the Council’s adopted spatial standards for internal and external living space and safe car parking provision cannot be achieved. Additionally where the quality of the new and existing living environment is compromised and the character of the original plot structure and existing street scene is considered to be eroded.

Plot subdivision and over intensification.
Housing Intensification

Pressure for housing land, due to its availability and cost means that we must use land more efficiently, maximise opportunities to promote sustainable lifestyles and the delivery of good quality places to live.

1. Areas within Sandwell will generally be considered as urban or suburban although some areas around Sandwell Valley and the Green Belt edges will be considered rural in character.

2. Housing intensification is simply a measure of how effectively we use land. Sites are not all the same and should be treated individually. Site capacity will be determined by location and the characteristics of the area.

3. The success of housing intensification depends on how comfortable a place feels to live and move around in as well as its social characteristics. The design quality that underpins housing layouts is critical to their success or failure as living environments.

<table>
<thead>
<tr>
<th>Rural Fringe</th>
<th>1 to 20</th>
<th>Leafiest, most expensive suburban; detached houses with large gardens.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban Outer</td>
<td>20 to 40</td>
<td>Most British built housing for owner occupation in the twentieth century falls into this density band, as does a great deal of council housing. It ranges from smaller and medium-sized detached houses through semi-terrace and terraces. In the middle tie the 30 homes per hectare standard set in the Tudor Walters report of 1919. The average net residential density of homes built in England in the 1750s was 25 homes per hectare.</td>
</tr>
<tr>
<td>Suburban Inner</td>
<td>40 to 60</td>
<td>Detached housing drops out in this band. Spacious Victorian and Edwardian houses built in terraces, more compact modern houses built in the last forty years in terraces and semi-detached, both council and owner occupied. Some blocks of municipal flats also fall into this band, due to generous quantities of courts and lawns around them.</td>
</tr>
<tr>
<td>Edge of Centre</td>
<td>60 to 80</td>
<td>The semi-detached design drops out of typical inner city residential densities. Includes fairly spacious, three and four storey houses built in the eighteenth and nineteenth centuries as well as flats, maisonettes and some modern high-density terrace designs and apartments. Working class by-law housing of the nineteenth century on the edge of traditional town centres. No front garden, front doors open onto pavements, very small back gardens or yards. Denser, larger, post-war estates of municipal flats, including tower blocks.</td>
</tr>
<tr>
<td>Town Centre</td>
<td>100+</td>
<td>Unusually high densities. Private Sector apartment block development (new build and conversions) in major town centres.</td>
</tr>
</tbody>
</table>

Source: Newman and Kenworthy quoted by Dr Jon Casper, 2005 Oxford Brookes University
o. Higher density solutions work more efficiently when they are located close to local facilities and public transport connections. The better served and connected a development is, the stronger the case will be for achieving higher density design standards and providing lower car parking provision. Arguably this could be considered relevant to the majority of the borough. However this blanket solution for developing new housing across the borough will not be favoured. Lower density solutions will be sought where the established urban character dictates it. For example where established low density environments demonstrate individuality and a sense of place through layout, plot designs, housing typologies and landscape.

p. Proposals to develop at a scale and mass that are considered to be out of character with the surrounding context will be resisted. Character will be measured against existing densities and density ranges considered appropriate to the area whilst having particular regard to the National Planning Policy Framework and Black Country Core Strategy.

The Black Country Core Strategy recommends a minimum net housing density of 35 dwellings per hectare in Policy HOU2 except where the design approach would prejudice historic character and local distinctiveness as defined in Policy ENV2.

2.2 Working with the Site and its Context

The following design principles need to be adhered to when developing new housing whether at large or small scale as well as extending personalising existing residential dwellings.

a. New housing layouts must where opportunities exist be designed to respect the existing landscape, topography and the ecology of areas. Layouts must maintain and highlight these intrinsic assets whether existing built form or landscape in new development proposals.

b. The individuality of places must be retained particularly in parts of the borough where the nature of mature suburbs and low
density plot ratios and established garden areas set the character and sense of place. Primarily but not exclusively these areas are found in Great Barr, areas of West Bromwich and Cradley Heath.

c. Development will be resisted within suburbs where block and plot structures are intact and where it is considered that the quality of the area will be unacceptably eroded, through the demolition of existing dwellings and compromised by new development layouts that are not complementary and inferior to the overall spatial ambience of the area.

d. Design consideration must be given to the orientation of dwellings to face onto open space frontages or water courses and maintaining established links and green and wildlife corridors.

e. Respect must be given to established building heights, building lines and visual links within established streets when integrating new build.

f. Proposals must ensure that housing typologies blend in visually. For example that window proportions are harmonious and that visual connections are maintained with primary habitable rooms and access points in the same manner as the established street scene.

Canal Frontages

g. Residential moorings must be designed in conjunction with other adopted strategic and Council policy contained in the Black Country Core Strategy and the Site Allocations and Delivery Document.

h. It will be considered unacceptable for development proposals to ignore canal frontages by orientating new build to turn their backs on to them. New developments must be designed to interact with the canal by providing access and views to it. Windows must be placed within the canal side elevation of buildings to allow surveillance of the canal environment.

i. New canal side buildings must reflect the scale, form and composition of existing canal side development where appropriate.

j. Materials used for canal side housing developments must reflect traditional design codes in terms of colour, texture and pattern.

k. Existing canal side buildings should be reused where at all possible.

l. Continuous building lines that close off spaces or visual links onto the canal side must be avoided, to ensure that the canal frontage is opened up to the wider housing layout and natural surveillance is assisted.
Given the extent of the canal network in Sandwell, new development proposals need to embrace both the waterside opportunity and the potential to raise development values by integrating canal frontages into design layouts.

**Trees and Landscaping**

- New development offers an opportunity to improve the local environment especially in urban environments where green space is often at a premium and it is important to enhance existing and develop new green networks within new residential proposals.

- The loss of healthy mature areas of established planting, including trees and hedgerows, will be resisted where it is considered that these form an intrinsic part of the areas character and appeal. Trees and mature landscape areas provide intrinsic qualities and provide natural habitats for wildlife. Their retention also assists with the integration of new development proposals into established areas. Where removal is proposed clear evidence will need to justify their loss, and replacement proposals agreed.

- Major development proposals in particular should include appropriate new levels of landscaping and tree planting to ensure the future attractiveness of housing layouts and assist sustainability. As a minimum tree planting will generally be expected to be of a heavy-standard quality and all hedge and shrub planting should be of a mature standard. All planting should be of a suitable species for the chosen location.
q. Landscape designs must form part of the overall design solution for sites and not be provided as an afterthought to infill left over spaces, that due to their size or location are undevelopable and furthermore likely to present future management issues for occupiers. (Refer to Policy 1.2 c)

r. Ensure that tree planting proposals are realistic, that appropriate species are identified and that sufficient space is provided for tree planting is proposed it should be a minimum of extra heavy standard (14/16 cm girth and 3 to 4 metres tall) to ensure immediate visual impact and improve the chance of survival. The specification of trees should be chosen with care according to location. For example in private garden areas ornamental trees should chosen whereas in streets and public spaces the future shape, potential shading and future growth potential needs to be considered. Additionally within the public realm the addition of tree supports and grilles will be necessary subject to location.

Refer to Appendix 5 – Codes of Good Practice for Tree Planting

Climatic, Ecological and Social Sustainability

s. Places need to be socially, environmentally and economically sustainable in order to become successful and popular places to live. Well-thought-out designs in terms of the built form and layout both internally and externally will increase the life span of the development and can reduce resource and energy consumption.

t. It is important that design solutions respect, consider and interact with the natural environment and seasonal change. Design Statements will need to demonstrate how methods of sustainable design and construction will be incorporated into schemes and comply with adopted policy including ENV7 Renewable Energy contained in the Black Country Core Strategy.

u. Designs must be orientated to maximise access to natural light and reduce overshadowing. Orientating buildings up to 30 degrees towards the south will create an east-west street pattern and still enable 90-95% of the maximum output for solar collectors to be produced.

Window designs can help compensate for the loss of light where design solutions have to be considerate of plot orientation and issues of
overlooking. For example, include convex, balcony and deeper window designs in single aspect flat and apartment designs to increase levels of natural daylight into habitable rooms.

- Optimise building depths to allow access to natural light, particularly for flat and apartment designs and narrow frontage house design.

v. Incorporate construction techniques that minimise waste and that reuse or recycle materials where possible.

w. Incorporate design features that use energy, water and other natural resources efficiently. For example wind can be used as a means of natural ventilation and has the potential to become a valuable energy source in exposed locations.

x. Include effective surface water disposal solutions and reduce where at all possible conventional methods of water collection through extensive drainage networks and discharge into water courses. Sustainable approaches to surface water disposal should explore the options for reusing surface water by providing water butts and soakaways, by using permeable paving and including landscape features such as swales and detention ponds so that grey water can be reused for irrigation of gardens and landscape areas.

y. Include landscape features that provide habitats for wildlife absorb carbon from the atmosphere and reduce wind speeds. For example green landscaping provides natural habitats for local wildlife as well as shelter from draughts that contribute to building heat loss. Trees and hedges provide natural windbreaks to prevailing winds and can provide shelter-belts on north eastern slopes. Deciduous trees provide shade in the summer. However consideration needs to be given to
mature heights so as not to block out sunlight particularly in winter months.

Further information can be obtained from:

Information on Sustainable Drainage Techniques and Water Minimisation and Recycling is available from the Environmental Agency.


2.3 Creating Well Defined Streets and Spaces

Built form defines streets rather than road carriageway. How buildings are orientated and designed internally to respond to the streets is also essential to their success. Therefore the following policies need to be considered when designing new housing layouts.

a. Improve the visual experience of places by being considerate of the sense of enclosure or openness and visual connections achieved in design proposals.

b. Build onto or reflect the existing identity and architectural detail of places, by using materials, colours and textures that match or which are complementary.

c. In suitable locations where levels or the location of the development site permits, introduce variety and identity through varying building heights.

d. Adhere to established height to width ratios of street dimensions and plot sizes. Also be considerate of the impact of building heights on the skyline, proportion and scale of windows, position of doors, setbacks and front boundary treatments, in order to reinforce place identity and fit in to existing streetscapes and context.

e. When designing major new housing layouts ensure that development proposals provide a varied townscape that is interesting, identifiable and easy to use due to its layout and how a variety of house types respond to external spaces. Additionally create a hierarchy of streets and spaces and also consider their enclosure using the following rules of thumb.
f. New development must complement the existing context and generally aim to “fit-in” and not “stand-out” unless clear justification can be demonstrated. Occasionally there are opportunities for building statements to be created such as landmarks but more generally local focal point buildings. For example a corner location at a busy road junction or where there are opportunities to reinforce visual linkage.

g. Buildings should not turn their back on main connecting routes or public realm. Primary active frontages must face out onto the street and public spaces at ground floor level. This helps to enliven and define the public realm as well as improving safety and security by encouraging natural surveillance.

h. Main access points into dwellings should face out onto the street. Flatted designs must also seek to maximise ground floor access points onto the street frontage.

i. Blank gables and boundary wall designs must be avoided where they impact on the street scene.

j. In corner locations, design solutions need to turn the corner. They should be designed to have a dual frontage i.e. fenestration to primary living areas, in locations where natural surveillance can be improved. Where issues of overlooking exist, architectural detailing should be added to enliven gable designs.

k. Avoid staggered house designs as this design solution can have a deadening effect on the street when viewed from certain angles due to the combined impact of blank gable returns in a continual run. Where the size and shape of sites dictate this type of design approach to develop land efficiently, bespoke architectural solutions must be included, so that interest and natural surveillance is added to the street and the problem avoided.

l. Do not prioritise frontage car parking within plot structures as this has a deadening effect on the street visually as well as potentially impacting on safe and convenient access into the dwelling or along street frontages.
Where public spaces are proposed whether hard or soft, or play space is included in development layouts it should fit into the context of the area. Spaces must be integrated into the development layout and not be pushed to the edge of layout proposals, where they are not overlooked by built form and natural surveillance is restricted. This avoids ownership becoming confused and the compromise of safety and security for residents and the users of the space. (Refer to Policy 1.2 e)

2.4 Easy to Find Your Way Around

a. In major development proposals create a network of well defined streets and spaces with clear connecting routes that are logical, convenient and memorable. Also ensure that new routes and spaces integrate well with the existing context as this enables people to find their way around more easily and conveniently, it also allows better access to existing local facilities and public transport links making places more sustainable. This is extremely important where higher density design solutions are being proposed and where car parking is reduced.

b. The needs of the pedestrian must be of primary consideration when designing housing layouts, public spaces, footpath and road layouts. Streets are part of the public realm and they must be designed to make a positive contribution to it and do more than just accommodate vehicular traffic.

Please refer to Appendix 3 – Guide to the Design of New Streets

c. It is imperative to achieve safe and convenient access for all in new residential layouts. Ensure that buildings and public spaces are accessible to everyone wishing to access places, including wheelchair users, other people with disabilities, elderly people, cyclists and those with young children.
d. Consider carefully how new development proposals blend in with the existing context and how visual connections will be achieved with the existing and proposed built form. Also incorporate new development features to promote viewpoints, local focal points and in some cases landmark statements. This is to ensure visual interest as well as assist way finding.

e. Where large strategic housing layouts are proposed care must be taken to create distinct character areas within layouts to ensure that a sense of place is created that is enjoyable and memorable.

f. Care must be taken to avoid blocking existing positive views from the development as well as creating negative views into and within new housing layouts. For example, where consideration is not given to incorporating views of established focal points or landmarks and where streets are terminated with garages or car parking, the rear or blank gables of buildings, boundary fences or walls.
The Lyng, West Bromwich. The Council working in partnership with Barratt Homes (working with IDPartnership).
Street and Home

Street design forms part of the public realm within residential layouts. Good quality streets need to be pedestrian friendly as their design underpins the success of living environments. Buildings must also be designed to reduce the fear and perception of crime. The careful siting and layout of new homes, both externally and internally will assist in the creation of safe streets that are easy to use and interpret, and complement good road design to help reduce traffic speed.

Creating good quality well constructed homes in attractive and safe living environments that are cared for and well managed is a prerequisite when designing new housing layouts. Individually homes need to be large enough for families to grow and offer choice and variety to meet changing needs.

Public Realm includes highways, cycle links, footpaths, open spaces, play areas, street furniture and public art.

Private Realm is considered as those spaces that belong to or are controlled by the occupier of individual or groups of dwellings. These include front, side and rear garden areas, parking courts and separate pedestrian links where they have been designed to connect private space; such as to the rear of terraces.

3.1 Streets for All

This section should be read in conjunction with Appendix 3 - Guide to the Design of New Streets.

a. Design a network of integrated streets that incorporates pedestrian and cycle links safely.

b. Create a simple grid pattern of street layouts as this works best, it also offers the most choices to users and connects places successfully. Concerns about ‘rat-running’ can be overcome by designing road layouts that restrict vehicle speeds and prioritise pedestrian and cycle movement.

c. The careful siting of built form will also assist in helping to reduce traffic speeds in some cases.

d. Layouts where there is an over-reliance on cul-de-sac design must be avoided as they limit choice and disconnect places from the users of the public realm. Overlong designs also have implications for the design of streets as access for emergency access impact on the widths of streets and the creation of turning areas, which can be considered over dominant in residential environments.

e. Where there is no alternative to incorporating cul de sac designs their length needs to be short and direct. There will
be design implications where cul de sac lengths are proposed in excess of 140 metres for emergency access.

f. Where cul de sac designs are proposed designing enclaves of similar house types must be avoided as this does raise safety and security concerns. For example grouping occupiers with similar movement patterns and predictable hours of occupation reduce the natural surveillance of an area at certain times of the day.

g. Gated cul de sac designs are generally unacceptable as they propose to privatise public space and further reduce accessibility.

h. Early pre-application discussions are recommended with the Council where shared surfaces are considered for inclusion. It is the Council’s view that shared surfaces work best in highly sustainable locations, minor streets or lower density areas where the demand for car parking is reduced. In their truest sense, shared surface designs allow for pedestrian primacy, children’s play and opportunities for landscaping. Car parking is managed and designed to be less imposing and traffic speeds are reduced significantly by virtue of the overall design.

i. In shared surface street design footway links will need to be delineated with a 50 mm kerb height.
j. As a general rule pedestrian and cycle links must not be isolated from the street network. If it is necessary to provide such links so that places are connected more conveniently, then the safety and security of users must be a key design consideration. Routes must be overlooked by active frontages, have appropriate lighting and be maintained. Furthermore segregated routes must be designed to exclude access by motorbikes.

k. All new homes should be accessible for people with disabilities.

l. Dwellings must be orientated so that primary habitable rooms and front doors visually connect with the street network. In addition the discreet placement of utility boxes will be required so that they do not visually dominate primary frontages. Think about siting housings in discreet locations such as at the back of boundary detailing.

m. Careful design consideration must be given to the quality and perception of front garden areas and how dwellings are accessed. For example the sensitive use of materials so that they are sustainable over time and minimise level difficulties to ensure safe pedestrian movement into the property. Ensure that access into the property is not restricted by vehicle parking or dominate frontage design with too many parking bays, also minimise the opportunity for careless front bin storage. Failure to consider these factors results in a negative impact on the space and perception of the dwelling and street.

3.2 Safety and Security

It is a clear aim of this document to consider safety and security as a key component of good design and policies contained within this document which support and underpin the following objectives.

a. Safety and Security are vital elements of new housing design. Creating the perception of personal and community safety
is a complicated issue, as negative impressions do not always relate directly to actual incidences of crime. Places should be designed to be comfortable and convenient to use. Thoughtful design quality enhances everyone's sense of well-being, makes places more usable, easy to understand and secure. Consider safety and security as components of good design.

b. Successful places combine good design, good management and community involvement. They increase the potential for social interaction within an area thereby reducing opportunities for crime and the fear of crime for communities, the places they use and the property they own.

c. Create lively places which are well used and easily overlooked. This can be achieved by introducing a variety of house types which cater for different tenures, age groups and family composition. This ensures that places re-used more effectively over longer periods of the day. Locating primary windows facing onto the street ensures natural surveillance and in addition take care that finished window heights at ground floor, enable people to look out onto the street from a seated position.

d. Avoid developing a fortress mentality in design solutions for housing, fencing and gate designs. Such designs send out the wrong message and increase the perception of crime in many cases.

For more information on Crime and Safety refer to Appendix 4 and the Council's SPG on Community Safety.
Further information can be obtained on Secure by Design standards by contacting West Midlands Police – www.securedbydesign.com

3.3 Car Parking

This section should be read in conjunction with Appendix 3 - Guide to the Design of New Streets – Car Parking Standards.

a. A common sense approach needs to be taken towards the amount of car parking that will be generated in new housing layouts and how this will affect the success and perception of new housing. Fundamentally, balancing the expectations of car parking demand and the desire of occupiers to park near to their property as well as visitors, and additionally designing out the potential for that demand to impact unduly on the character and overall setting of the street, as well as the amenity of residents, is a key design consideration.
b. Car parking arrangements and garaging facilities must not dominate the frontage of housing or inconvenience pedestrian or cyclist movement unduly. For example an over reliance on clusters of integral garage designs must be avoided, as this results in a poor visual connection from the street with the property, restricts natural surveillance onto the street and continual runs of dropped kerb arrangements hinder pedestrian movement.

c. In large housing layouts consideration must be given to including a combination of parking treatments to cater for demand. There should be a balanced approach to providing in plot car parking, small courtyards and restricted areas of frontage parking as this will help reduce the dominance visually.

Family Dwellings

d. As a general rule garaging and driveway facilities must be set to the side of house designs so that enclosure and visual linkage is maintained with the street and parked vehicles are less obtrusive on the street scene.

e. Car parking needs should ideally be contained within the curtilage of individual plots for family housing, particularly in larger plot designs (4+ bedrooms).

f. Private driveways must serve no more than five family dwellings. His is to avoid substandard servicing arrangements being provided for large groups of properties where the resulting impact of deliveries and visitor parking will impact unduly on the wider context.

g. Large areas of exposed frontage car parking must be avoided in design solutions to avoid car parking dominating built form in continual runs, whether for flatted, terraced, semi-detached or detached designs. Such designs disconnect buildings and pedestrian entrances from the street and result in poor visual linkage and environmental quality being eroded.

Car parking set back at the side of built form reduces the dominance of vehicles on the street frontage.

Avoid prioritizing continual runs of frontage car parking. It creates poor visual links and impacts unduly on defensive space of occupiers and reduces the quality of the streetscene.
h. Parking bays, garages and circulation space need to be large enough spatially in order not to discourage use.

i. Car parking bays should be connected by safe and convenient pedestrian connections to the related dwelling and walking distances must not be unreasonable or inconvenient so as to deter use.

j. Generally all car parking areas must be overlooked. Remote car parking will be unacceptable as it becomes problematic for residents and results in a greater demand for on-street car parking provision.

k. Soften parking areas with appropriate levels of planting where frontage or courtyard designs are proposed. Ensure that the landscaping proposed is good quality, has sufficient space to grow, and is mature enough so that it has an opportunity to become established.

l. Car parking courts designs should only be considered for small groups (no more than 6 dwellings) of family homes and must be designed at a domestic scale. These spaces must be private and for residents use only so that security can be maintained. Materials and boundary detailing should demonstrate residential quality and courts must be overlooked and illuminated. Avoid white lining to mark out spaces and allocation numbers as this method is unsightly. Alternative block or metal markers to delineate spaces should be considered. Also make sure that suitable management plans are in place to ensure the long term success and maintenance of courtyards. How management and maintenance will be achieved needs to be detailed in the Design and Access Statement and will be conditioned at the approval stage.

m. The entrance to courtyard and undercroft designs must be monitored by natural surveillance from adjoining properties be secure and properly managed. Where gated designs are included, maintenance and management plans will need to be in place. This ensures that gated designs continue to operate effectively and also avoids future disputes over responsibility.

n. In traditional terraced streets where frontage car parking is considered wholly inappropriate to serve infill development, the design solution must seek to accommodate safe rear or possibly side, car parking provision so that it does not visually dominate the street and disrupt the street scene. Where this cannot be achieved because space does not permit, then consideration may have to be given to on street car parking allocation subject to highway approval. However in areas where there is already a high demand in established residential areas, the cost of implementing a residents’ car-parking scheme will be passed onto
the development usually via a Section 106 Agreement, between the developer and the Council.

o. Where garages and driveways are provided in higher density housing layouts and counted as parking spaces, they will be conditioned to remain as such. Consideration regarding the conversion of garaging/parking spaces into living areas will only be acceptable where it can be demonstrated that sufficient car parking can be accommodated elsewhere safely within the plot.

Apartments

The design principles contained policies above - Car Parking for Family Dwellings g to m above will also apply to the design of courtyard parking provided for apartments.

p. The size and layouts of parking courts serving apartments must aim to be domestic in scale and appearance. Where large areas of parking are proposed for major schemes, break down groups of parking spaces into zones/rooms and increase the level of landscaping to soften the visual impact of parking areas.

q. Ensure that parked vehicles are positioned away from building frontages to maintain adequate levels of defensible space for residents.

r. In apartment block layouts where servicing vehicles must enter the site, vehicle movement must be tracked for the largest vehicle that is likely to enter the site e.g. for waste collection, to demonstrate that it works. Vehicles must be able to leave the site in a forward gear.

s. As a general rule apartment block layouts and family homes must not have combined servicing arrangements off unadopted sections of highway or private drive arrangements.

t. Car parking bays serving apartments must be clearly and safely allocated to residents, and the intention for ongoing management and maintenance of the space explained in the Design and Access Statement. Future management and maintenance will be a condition of the planning consent.

Car parking standards for Nursing/Care Homes and Homes in Multiple Occupancy will be considered on the individual merits of the development proposal.

Refer to Appendix 3 – Guide to the Design of New Streets and/or contact the Highway Safety Team on 0845 3521879.
3.4 Public and Private Spaces

For clarification, public space relates to spaces in and around development which is maintained and managed by third parties including the local authority. The private realm is everything within the curtilage or plot structure of individual dwellings, sometimes referred to as defensible space, which is managed and maintained by the occupier.

a. Consideration must be given to the quality of the public and private realm within new development layouts. How space will be used, how it will be perceived and the standard of materials used, as well as how it will be managed and maintained over time are essential design considerations. Good quality well used and well managed and maintained spaces enhance the quality of life for residents and reinforce a sense of place.

Public Space

Open space policy is now covered by Black Country Core Strategy 2011 DEL1 Infrastructure Provision, the Sandwell Planning Obligations SPD 2011, and Policies EOS1 and EOS4 in the Sandwell Site Allocation and Delivery Document.

b. Public spaces must be comfortable, convenient, safe and stimulating places to use and easy to understand in terms of finding your way around.

c. Careful consideration must be given to the quality and type of materials chosen for both hard and soft landscape areas and their durability and life time expectancy.

d. Existing landscape features need to be retained/enhanced and integrated into new development proposals. For example, topography, buildings and landscape features that lend a positive identity to places.

e. All routes must be designed so that they are overlooked by surrounding development. Where pedestrian connections are provided through open areas they must be illuminated at night.

f. Focal points and sometimes landmarks can be designed in new housing layouts or even the landscape to help people find their way around.

g. Integrating new public realm areas within new housing layouts such as seating areas, play areas and shared space within street designs can be offset against the open space requirement on major schemes so long as the “up-lift” in quality and future maintenance is clearly demonstrated. Early pre-application discussions are advised where this concept is considered.
h. Primary entrance points into dwellings, including apartments, need to be accessed from the street and entrance points must be clearly visible from the street. Where at all possible, ground floor accommodation within apartment blocks should also be accessed directly off the street/public realm.

i. Blank exposed gable designs must be avoided. Fenestration and or architectural detailing must be added to improve visual linkage and natural surveillance of the public realm.

j. Where rear garden boundaries are clearly visible from the street they must be constructed in a brick or combination brick and timber/rail design so that they are visually more pleasing.
**Private Space**

**k.** As a general rule new housing layouts will be expected to provide adequate private garden space for occupiers. Strong justification must be given in an accompanying design and access statement if no or limited conventional private amenity space is proposed. Where agreed, other forms of useable space will need to be provided. For example roof terraces, full balcony designs and well-designed shared spaces as well as giving consideration to the proximity of nearby parks. (Refer to Policy 3.4.t)

**l.** Block structure layouts where rear back garden areas back on to rear back gardens work best, as they provide secure and private amenity space.

**m.** Exposed rear garden boundaries facing onto the public realm must be avoided. Such designs have a deadening affect on the street and raise safety and security concerns.

**n.** Differentiation between the public and private realm needs to be clear. Durable boundary treatments will be expected and where boundaries are visible from the public realm they need to add visual interest to the street.

**o.** The design of front garden boundary detailing must respect the local established design code where it makes a positive contribution to the quality of the street scene. Generally timber designs should be avoided in favour of brick and metal rail. Where hedge planting is proposed in suburban locations the quality and size of shrubs must be semi mature. However, this solution is unlikely to be acceptable on its own, where frontages face onto primary street frontages and pedestrian/cycle connections unless supported by wall or wall/rail detail.

**p.** When designing infill development ensure that ground floor internal room layouts respond to established design codes in the street, such as front facing lounge windows. Avoid layouts where kitchen and toilet/bathroom windows dominate the street scene as this has a deadening affect and restricts natural surveillance.

**q.** Care must be taken when designing internal housing layouts and to how they respond externally to the street. Ensure that natural surveillance is possible from main habitable rooms on to building frontages and that front entrance points are legible from the street.
Careful consideration needs to be given to the quality of defensible space and definition of boundary treatments between primary elevations and the street.

r. House designs need to be mindful of the need for defensible space. Where designs are pulled forward to maintain enclosure in accordance with the street pattern careful thought needs to be given to issues of privacy. For example where terraced house designs address the back of pavement, thought needs to be given to the size and design of fenestration. Designs need to promote two-way natural surveillance but not at the expense of the occupiers’ privacy or restriction on access to light.

s. Private pedestrian access designs that connect buildings to external spaces should be safe, easy and direct. Overlong rear access points to serve dwellings must be avoided. Gated entrances should be included to provide security and to clearly delineate private amenity space.

Space Standards - Codes of Good Practice

t. The Council reserves the right to apply certain numerical standards to new housing development. Flexibility of these standards will be considered where innovative and well-designed development proposals are submitted and where design solutions have been considered and explained in a supporting design statement.

Standards provide a rule of thumb for developers and the Local Planning Authority. They will be applied, depending on individual circumstances, including design quality and context. Applying the standards will not dictate the success of new development proposals, as the application of good design principles contained in this SPD and other Council Policy need to be applied. Less rigid formulas will be applied where high densities are achieved that preserve private amenity space in good quality living environments.
External Space Standards

(i) Separation distance of 21 metres (minimum) between building rear faces from two storey dwellings, rising to 27.5 metres for three storeys and above and/or where main living room and kitchen windows are located above ground floor, the potential for overlooking existing neighbouring dwellings exists or where levels exacerbate the problem.

(ii) Separation distance between front facing elevations should respect building height to width relationships. The following heights to width ratios provide a rule of thumb for street widths.

(iii) Minimum separation distance of 14 metres between opposing one and two storey gables and rear facing windowed elevations, increasing to a minimum of 15.5 metres where three storey house designs are proposed. Where a flank wall will be situated at a higher level than a windowed rear elevation the separation distances should be increased by 1 metre for every 1 metre rise in building height and/or change in levels.

(iv) Minimum set backs of 1 metre from rear of pavement should be provided where 2 storey development is proposed; increasing respectively to correspond with increased building heights, unless established building lines dictate otherwise.

(v) A minimum separation width of 1 metre must be maintained between opposing gable designs in both new housing layouts and where new abuts existing.

(vi) Family housing plot structures must be designed with private amenity space of no less than 70 sq.m. in area or 10.5 metres in length. In cases where the topography is problematic or where small accommodation is proposed there may be some flexibility so long as the overall design solution for private amenity is of a high quality and usable. Permitted development rights will however be removed.

(vii) Where apartments are proposed there will be a minimum requirement for private amenity space of 10 sq.m. per unit. Amenity space should be designed and located so that it is usable and will not be accepted where calculations are based on left over spaces that are incidental to the layout of car parking areas and around built form. In certain locations where the provision of external amenity is impractical because of the characteristics of the site i.e. in town centre locations, full useable balcony designs may be acceptable as an alternative.

(viii) The 45-degree code will be used as a guide to determine the impact of ground floor extensions on neighbouring properties,
where planning consent is required. Increased storey heights will be judged on their individual merits but the 25-degree rule of thumb will be applied as a minimum to determine the impact of proposals on neighbouring properties.

(vix) Public and private space should be clearly defined in residential layouts. Open plan designs around housing frontages will be avoided where defensible space has the potential to be eroded and unless the context of the area dictates otherwise.

(x) The erection of screen walling or fencing of at least 1.8 metres in height on the defining boundaries of rear private amenity space will be required unless adequate mature screening or good quality fencing already exists.

(xi) Driveways and hardstanding areas for vehicles must not be designed or extended to more than 70% of front garden areas.

(xii) Left over spaces must be avoided where ownership is unclear or where management is likely to be problematic over time.

Internal Space Standards

(xiii) The size of internal living space within dwellings must be practical and it must be demonstrated on a scaled drawing that furniture can clearly be accommodated in all living areas. The following minimum space requirements will be applied.

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>No of Rooms</th>
<th>Minimum Internal Floor Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Flat</td>
<td>1 habitable room</td>
<td>40 square metres</td>
</tr>
<tr>
<td>1 Bedroom Flat</td>
<td>2 habitable rooms</td>
<td>50 square metres</td>
</tr>
<tr>
<td>2 Bedroom Flat</td>
<td>3 habitable rooms including</td>
<td>60 square metres</td>
</tr>
<tr>
<td></td>
<td>1 double and 1 single bedroom</td>
<td></td>
</tr>
<tr>
<td>2 Bedroom Flat</td>
<td>3 habitable rooms including</td>
<td>65 square metres</td>
</tr>
<tr>
<td></td>
<td>2 double bedrooms</td>
<td></td>
</tr>
<tr>
<td>2 Bedroom House</td>
<td>2 Storey</td>
<td>65 square metres</td>
</tr>
<tr>
<td>3 Bedroom House</td>
<td>2 Storey</td>
<td>80 square metres</td>
</tr>
<tr>
<td>4 Bedroom House</td>
<td>2 Storey</td>
<td>100 square metres</td>
</tr>
</tbody>
</table>
3.5 **External Storage and Amenity Space**

a. Development proposals must comply with minimum space standards both internally and externally (Refer to policies in 3.4.t).

b. New housing layouts and individual plot structures must be considerate to the everyday needs of occupiers and provide sufficient space to provide sustainable living environments and safeguard against poor living environments being created due to unacceptable levels of intensification.

c. The shape of individual plot structures and allocation of private amenity space needs to be functional and allow the opportunity for external storage to be provided.

d. Safe, durable and convenient cycle storage for occupiers and visitors must be provided in flat/apartment designs where minimum car parking standards are being proposed. There is a preference for internal storage to meet the needs of occupiers. Refer to Sandwell’s Cycling SPD.

e. **Waste Management**

   Effective Waste Management is critical in achieving clean and long term attractive environments in which people want to live. Providing adequate space for bin storage and collection is a practical issue that needs to be taken into consideration early when designing new homes and housing layouts. Early discussion with the LPA during pre-application discussion is recommended, particularly on major residential proposals so that waste management is considered as an integral part of the overall design concept and masterplan.

**Waste Storage Requirements**

Sufficient external space should be provided for the following.

- Single Properties - 2 x 240 Litre Wheelie Bins (Garden Waste and Dry Recyclables) 1 x 180 Litre Wheelie Bin (Residual Waste Bin) and 1 x 25 Litre Food Container

- Apartments and Multi-Occupied - 2 x 1100 Litre Eurobins for every 5 household units (Domestic Refuse and Dry Recyclables)

- Storage Requirements for Nursing/Care Homes will be based on the number of bedrooms provided. As a general rule 1 Eurobin for every five bedrooms.
Access and Amenity

(i) The location of bin storage needs to be accessible but not detract from the visual amenity of the street scene. Bin storage areas must be avoided that are located in front of built residential form as they have a poor negative visual impact on the street.

(ii) The need for convenient and practical waste collection must be considered carefully. Waste management plans must be proposed within Design and Access Statements. On major schemes early pre application discussions are recommended.

(iii) Containers must be presented for collection within 25 metres of the vehicle for wheeled bins and 10 metres of the vehicle for Eurobin collection. Drop kerbs will also need to be provided within new or existing highway design to allow containers to be rolled out conveniently to collection vehicles.

(iv) The travel distance between the storage point and collection point should be a smooth, flat surface wherever possible. Gradients should not exceed 1 in 12 and steps need to be avoided.

(v) The route that the collection vehicle has to follow should be built to withstand the load of a 26 tonne vehicle and be a minimum width of 3 metres and height of 4 metres where collection vehicles need to enter private space.

(vi) Where communal collection points are proposed where individual collection is impractical because vehicle access is not possible i.e. private road and parking court designs, collection points must not be provided on the highway carriageway or impact on residential amenity.

Family Dwellings

(vii) All dwellings must have safe and convenient rear access to enable the maintenance of rear garden areas and provide access to external storage including bin storage. Routes must be provided that are wide enough and sufficiently direct and safe for residents to use them.

(viii) Unmanaged bin storage can have a detrimental affect on the street scene and the ability to access properties given the number of containers that residents need to store. This situation needs to be avoided in housing layouts, and individual house designs and layouts need to ensure that it is possible to move bins to the rear of dwellings easily and conveniently and bring them out to the frontage on collection days only.

(vix) Bin storage must not dominate frontage areas or take visual priority over built form. The opportunity for the inconsiderate
storage of bins by residents needs to be designed out where at all possible in residential schemes.

**Apartments**

**(x)** Bin Storage must not dominate building frontage areas or take priority visually over built form.

**(xi)** Internal bin storage areas for apartments are considered preferable but only where they are designed to an appropriate size and where collection is not prohibitive.

**(xii)** External bin storage designs for apartments must be constructed in brick and includes roof detail so that waste is kept dry.

**(xiii)** Bin storage provision for apartments and multi-occupancy must be designed sufficiently large enough to meet storage needs. A gap of at least 150 mm must also be provided between containers to allow them to be moved out for emptying. Roof heights should not restrict the full opening of the containers and the storage area should be well-ventilated and have an impervious floor.

**(xiv)** Where secure management controls are in operation e.g. electronic gates, the intention needs to be clarified in the waste management plan and arrangements made for access on collection days with the Local Authority.
Homes in Multiple Occupancy, Retrofit to Apartments and Multiple Occupancy.

(xv) Adequate external storage facilities for bins will need to be provided that accord with policy 3.5.e. In extreme cases where space is restricted due to the existing context, alternative arrangements will have to be negotiated with the Local Authority and Waste Management Service Provider or Private Company Waste Management Company, for example in mixed use development. However arrangements will need to be clarified in the Design and Access Statement so that appropriate planning conditions can be added where necessary.

Waste Management Plans

(xvi) An appropriate strategy for waste management must be included in the supporting Design and Access Statement for all new residential proposals. This should provide clarity on the type of storage provision to be provided, when it will be provided, how it will be managed and how collection will be facilitated in accordance with policies set out above.

(xvii) For apartment and multi-occupancy schemes consideration needs to be given to the need for additional waste collections to be carried out as and when schemes become occupied as during this period of initial occupancy, waste storage needs are exacerbated in communal storage areas. This transition period needs to be considered by the applicant, and possible extra collections will need to be funded and arranged with the Local Authority.
References

Bentley I et al. 1985 Responsive Environments
Building for Life Partnership (CABE at The Design Council, Design For Homes and Home Building Federation) 2012 Building for Life 12
Cooper J 2002 Defining Good Design in Sandwell Officer Training Event
Commission for Architecture and the Built Environment on Behalf of the Building for Life Partnership 2008 Building for Life
Communities and Local Government 2012 National Planning Policy Framework
DETR and CABE 2001 Better Places to Live – By Design
DETR 1998 Planning for Sustainable Development: Towards Better Practice
Dudley MBC, Sandwell MBC Walsall Council and Wolverhampton Council 2011 The Joint Black Country Core Strategy
Institute of Civil Engineers 2000 Returning Roads to Residents: A Practical Guide to Improving Streets
Homes and Communities Agency 2007 Manual for Streets
Homes and Communities Agency 2010 Manual for Streets 2
Krunczkowski S and Smith P 2012 OPUN the Architecture Centre in the East Midlands
Llewelyn Davis 2000 Urban Design Compendium
Royal Town Planning Institute The Housing Corporation, DTLR, National Housing Federation and House Builders Federation 2001 Working Together – A Guide for Planners
Sandwell MBC 2004 Superceded Residential Design Guide Supplementary Planning Guidance
Sandwell MBC Intensification Paper 2007 Superceded Residential Supplementary Planning Document
Sandwell MBC 2012 The Site Allocations and Delivery Development Plan Document
Sandwell MBC 2013 Draft Community Infrastructure Levy (CIL)
It is anticipated that CIL will be introduced in Sandwell in July 2014. In terms of residential development, it is proposed that developments of over one unit, in limited specified areas of the borough, will be subject to CIL. Further details are at http://www.sandwell.gov.uk/downloads/download/1372/community_infrastructure_levy.

Tibbalds F 1992 Making People Friendly Places

Appendices

1 - Homes in Multiple Occupancy: Standards published by Sandwell Housing
2 - Identifying Local Character Matrix
3 - Developers Guide to the Design of New Streets
4 - Codes of Good Practice for Tree Planting
APPENDIX I  -  HOMES IN MULTIPLE OCCUPANCY STANDARDS
THE HOUSING (MANAGEMENT OF HOUSES IN MULIPLE OCCUPATION)

REGULATIONS 1990

STANDARDS IN HOUSES IN MULTIPLE OCCUPATION

Note:-

The following is a brief description of the various categories mentioned in this document.

Category:  A  Houses occupied as individual rooms or bedsits.
          B  Houses occupied on a shared basis.
          C  Houses which have let in lodging.
          D  Hostels, Guesthouses and Bed and Breakfast accommodation.
          E  Houses registered under the Registered Homes Act 1984.
          F  Houses converted into separate flats but sharing a common area.
Standards

**CATEGORY A HOUSES**

**A  Space Standards**

one person unit of accommodation

(i) One room units:  
- 13m² including kitchen facilities
- 10m² where provided with separate shared kitchen

Shared kitchen shall provide

(ii) Two or more roomed units:
- Each Kitchen: 4.5m²
- Each living/kitchen: 11m²
- Each living room: 9m²
- Each bedroom: 6.5m²

Two or more person units of accommodation

(ii) one room with
- Not normally suitable for two or more persons who are married couples or cohabitees. In other cases for two persons only 20.5m²

(ii) Two or more roomed units:
- Each living/kitchen: 15m²
- Each living room: 12m²
- Each living/bedroom: 14m²
- Each bedroom: 10m²
- Each kitchen: 7m²

These figures are based on a two person occupancy. For occupancies of more than two persons reference should be made to Table 1 of the Sixth Schedule of the Housing Act 1985 when considering the permitted number to use the house for sleeping (see Sections 325 and 326 Housing Act 1985).

**B  Natural Lighting**

1 All habitable rooms shall be provided with an area of clear glazing situated in either a window and/or a door, equivalent in total area to at least 1/10th of the floor area of the room.

2 All kitchens, bathrooms and water closet compartments shall comply with 1 above. Where this is not practicable, adequate artificial lighting shall be provided in accordance with the requirements of Part C, to the satisfaction of the relevant officer.

All glazing to windows in bathroom and water closet compartments shall be obscure.

3 All staircase, landings and passages shall be provided with an area of clear glazing in a window. Where this is not practicable, adequate lighting shall be provided in accordance with the requirements of Part C, to the satisfaction of the relevant officer.

**C  Artificial Lighting**

1 All habitable rooms, kitchens, bathrooms, water closet compartments, staircase, landings and passages shall be adequately lighted by electricity.

Time switches should only be allowed to common landings, passages and staircases and should stay on for an adequate time to allow a person to climb stairs etc, and enter a room.
There should be sufficient switches to operate the artificial lighting on each lighting on each landing, corridor or passage and each switch should allow adequate lengths of corridors, passages and stairways to be illuminated at the same time.

D Ventilation

1 All habitable rooms, kitchens, bathrooms and water closet compartments shall have a minimum floor to ceiling height of 2.3m (7'6") except in the case of attic rooms which shall have a minimum height of 2.3m over an area of the floor equal to not less than half of the area of the room, measured on a plane 1.5m (5'0") above the floor.

2 All habitable rooms shall be ventilated directly to the external air by a window, the openable area of which shall be equivalent to at least 1/20th of the floor area of the room.

Neither an openable door giving access directly to the external air nor a louvred opening in such a door will be acceptable for the purpose of this requirement.

3 All kitchens, bathroom, water closet compartments shall comply with 2 above but where this is not practicable, mechanical ventilation providing a minimum of three air changes per hour shall be provided. Such an installation shall be fitted with an overrun device for a minimum of 20 minutes and be connected to the lighting circuit of the room.

4 Permanent means of ventilation in the form of a flue, airbrick, hit and miss ventilator or louvred window shall be provided in all dinning/kitchens, kitchens, bathrooms, water closet compartments, and any other rooms containing either cooking and/or washing facilities.

E Water Supply

1 Each separate occupancy shall be provided with a supply of cold running water suitable for drinking purposes either directly off the rising main or by such other means as are acceptable to the relevant Water Authority.

2 The water pressure to all fitments shall comply with the minimum requirements laid down by the relevant Water Authority at all times.

3 All water supplies shall, where necessary, be protected from frost damage.

F Personal Washing Facilities

1 Each separate occupancy shall be provided with a wash hand basin together with its own supplies of hot and cold running water, situated within the unit of accommodation, and of minimum dimension 560mm x 430mm.

If a sink is provided to comply with the requirements of paragraph 1 a separate wash hand basin will not be required.

2 Each separate occupancy shall be provided with its own bath or shower each in a proper room. Where this is not practicable a readily accessible bathroom or a shower room, being not more than one floor distant from any user, shall be provided in the following ratios:

<table>
<thead>
<tr>
<th>Number of Persons</th>
<th>Bathrooms/Showers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 persons</td>
<td>1 bathroom or shower rooms</td>
</tr>
<tr>
<td>6-10 persons</td>
<td>2 bathrooms or shower rooms</td>
</tr>
<tr>
<td>11-15 persons</td>
<td>3 bathrooms or shower rooms</td>
</tr>
</tbody>
</table>

Baths should be 1.67m in length; shower trays should be 800mm x 800mm and of a standard
compatible with the authority's renovation grant specification.

The hot and cold water supplies shall be exclusive (unless the rental or charge for accommodation includes the supply of hot water) and available at all times.

3 Baths and showers shall not be provided in kitchens.

**G Drainage and Sanitary Conveniences**

1 All above and below ground drainage shall comply with the requirements of the Building Regulations currently in force.

2 Each separate occupancy shall be provided with its own water closet compartment, being not more than one floor distant from each user, in the following ratios:

   - 1-5 persons - 1 water closets
   - 6-10 persons - 2 water closets
   - 11-15 persons - 3 water closets

   External water closets shall not be reckonable for this purpose.

3 Each shared water closet shall be situated in a room separate from the bathroom or shower room.

4 A wash hand basin shall be provided in each separate water closet together with its own continuous supplies of hot and cold running water. The hot and cold water supplies shall be included in the rental or charge for accommodation, unless the water closet is for the exclusive use of one occupancy.

**H Facilities for Storage, Preparation and Cooking of Food and for the Disposal of Waste Water**

**Kitchen Facilities**

1 Each occupancy shall have its own kitchen separate from but on the same floor as the sleeping room. Where this is not practicable, each occupancy shall have its own kitchen facilities within the unit of accommodation.

2 Shared kitchens may be provided for single person occupancies and where provided shall be on the same floor as the occupancies.

**Food Storage**

3 Each separate occupancy shall be provided with a proper food store of adequate size ventilated to the external air, within the unit accommodation. A refrigerator shall be considered to be a proper food store for the purpose of this requirement.

4 The space in a sink unit below the sink will not be accepted, ventilated or otherwise.

5 Where shared kitchens are provided, each occupancy sharing shall have its own facility either within the unit of accommodation or in the kitchen. If in the kitchen, the facility shall be lockable.

**Preparation**

6 Each separate occupancy shall be provided with a suitable work top.
In shared kitchens a work top of sufficient size shall be provided.

Cooking

Each separate occupancy shall be provided with a proper cooking appliance. The minimum acceptable will be:

(a) two rings or hot plates together with either a grill or oven for one person unit of accommodation, or
(b) a cooker with three or four rings or hot plates together with a grill and an oven for units of accommodation for more than one person.

Disposal of Waste Water

Each separate occupancy shall be provided with a sink with its own supplies of hot and cold running water.

In shared kitchens, sinks with adequate continuous supplies of hot and cold water shall be provided in the ratio of one sink per three one-person units of accommodation. The hot and cold water supplies shall be included in the rental or charge for the accommodation.

Space Heating

All habitable rooms shall be adequately heated by a fixed space heating appliance of either gas or electricity; solid fuel should only be permitted on the ground floor where it can be shown that there is adequate fuel storage and that there will not be any risk to safety from the removal of hot ashes. Use of the appliance will be exclusive (unless included in the rental or charge for accommodation). Portable or removable heating appliances will not be acceptable.

All heating systems shall be of a sufficient output so as to heat adequately the bedrooms and living rooms to a temperature of 65°F (18.3°C) with an outside temperature of 30°F (-1°C).

Refuse, Storage and Disposal

Refuse storage containers shall be provided sufficient for the needs of the house and of a type acceptable to the local authority. This should normally be in the ratio of one British Standard dustbin or equivalent per household.

All containers should be located on hardstanding with suitable access for cleansing of the area and removal of containers.

CATEGORY B HOUSES

A Space Standards

One Person units of Accommodation

(i) Each bedroom/study: 10m² except where a separate living room is provided which is not a kitchen or a kitchen/dinning room, in which case the bedroom shall be 6.5m²

Two Person Units of Accommodation

(i) Each bedroom/study: 15m² except where a separate living room is provided which is not a kitchen or a kitchen/dinning room,
in which case the bedroom shall be 11m²

3 Common Rooms

(i) Kitchens:
- used by 1-5 persons: 7m²
- used by 6-10 persons: 10m²
- used by 11-15 persons: 13.5m²
- used by 16+ persons: 16.5m²

(ii) Dining/Kitchens:
- used by 1-5 persons: 11.5m²
- used by 6-10 persons: 19.5m²
- used by 11-15 persons: 24m²
- used by 16+ persons: 29m²

(iii) Living rooms and dining rooms:
- used by 1-5 persons: 11m²
- used by 6-10 persons: 16.5m²
- used by 11-15 persons: 21.5m²
- used by 16+ persons: 25m²

B Natural Lighting

1 All habitable rooms shall be provided with an area of clear glazing situated in either a window and/or a door, equivalent in total area to at least 1/10th of the floor area of the room.

2 All kitchens, bathrooms and water closet compartments shall comply with 1 above where this is not practicable, adequate artificial lighting shall be provided in accordance with the requirements of Part C, to the satisfaction of the relevant officer.

All glazing to windows in bathrooms and water closet compartments shall be obscure.

3 All staircases, landings and passages shall be provided with an area of clear glazing in a window. Where this is not practicable, adequate artificial lighting shall be provided in accordance with the requirements of Part C to the satisfaction of the relevant officer.

C Artificial Lighting

1 All habitable rooms, kitchens, bathrooms, water closet compartments, staircases, landings and passages shall be adequately lighted by electricity.

   Time switches will only be allowed to common landings, passages and staircases and shall on for an adequate time to allow a person to climb stairs etc, and enter a room.

   There shall be sufficient switches to operate the artificial lighting on each landing, corridor or passage and each switch should allow adequate lengths of corridors, passages and stairways to be illuminated at the same time.

D Ventilation

1 All habitable rooms, kitchens, bathrooms and water closet compartments shall have a minimum floor to ceiling height of 2.3m (7'6") except in the case of attic rooms, which shall have a minimum height of 2.3m over an area of the floor equal to not less than half of the area of the room, measured on a plane 1.5m (5'0") above the floor.
2 All habitable rooms shall be ventilated directly to the external air by a window, the openable area
of which shall be equivalent to at least 1/20th of the floor area of the room.

Neither an openable door giving access directly to the external air nor a louvred opening in such
a door will be acceptable for the purpose of this requirement.

3 All kitchens, bathrooms, water closet compartments shall comply with 2 above, but where this is
not practicable mechanical ventilation providing a minimum of three air changes per hour shall
be provided. Such an installation shall be fitted with an overrun device for a minimum of 20
minutes and be connected to the lighting circuit of the room.

4 Permanent means of ventilation in the form of a flue, airbrick, hit and miss ventilation or louvred
window shall be provided in all dinning/kitchens, kitchens, bathrooms, water closet
compartment, and any other rooms containing either cooking and/or washing facilities.

E Water Supply

1 A supply of cold running water suitable for drinking purposes shall be provided for the use of all
occupants in each shared kitchen. The tap shall be marked "Drinking Water"

2 The water pressure to all fitments shall comply with the minimum requirements laid down by the
relevant water authority at all times.

3 All water supplies shall, where necessary, be protected from frost damage.

F Personal Washing Facilities

1 Each bedroom/study shall be provided with a wash hand basin together with its own supplies of
hot and cold water, situated within the unit of accommodation, and of minimum dimension
560mm x 430mm.

Where this is not practicable, shared facilities will be accepted for houses occupied by up to five
persons, by provision of a wash hand basin in each bathroom.

For houses occupied by six or more persons, shared facilities will not be accepted and a wash
hand basin shall be provided in each bedroom/study.

2 Each occupancy shall be provided with its own bath or shower, each in a proper room. Where
this is not practicable a readily accessible bathroom or a shower room, being not more than
pone floor distant from any user, shall be provided in the following ratios:

- 1-5 persons - 1 bathroom or shower room
- 6-10 persons - 2 bathrooms or shower rooms

Baths are to be 1.67m in length; shower trays to be 800mm x 800mm and of a standard
compatible with the authority’s renovation grant standard.

The hot and cold water supplies shall be exclusive (unless the rental or charge for
accommodation includes the supply of hot water), and available at all times.

3 Baths and showers shall not be provided in kitchens.

G Drainage and Sanitary Conveniences

1 All above and below ground drainage shall comply with the requirements of the Building
Regulations currently in force.

2 Each separate occupancy shall be provided with its own water closet compartment.

Where this is not practicable, a readily accessible water closet compartment, being not more than one floor distant from each user, shall be provided in the following ratios:

- 1-5 persons - 1 water closet
- 6-10 persons - 2 water closets

External water closets shall not be reckonable for this purpose.

3 Each shared water closet shall be situated in a room separate from the bathroom or shower room.

4 A wash hand basin shall be provided in each separate water closet together with its own continuous supplies of hot and cold running water. The hot and cold water supplies shall be included in the rental or charge for accommodation, unless the water closet is for the exclusive use of one occupancy.

H Facilities for Storage, Preparation and cooking of Food and for Disposal of Waste Water

1 Each occupancy shall have use of a kitchen separate from the sleeping room and whenever possible on the same floor but shall be not more than one floor distant from the users.

2 If the property is occupied by six or more people, kitchen facilities shall be provided in accordance with Category A provision.

The remainder of this section applies to a house occupied by five or less persons.

Food Storage

3 Each separate occupancy shall be provided with a proper food store of adequate size ventilated to the external air, within the bedroom/study room. A refrigerator shall be considered to be a proper food store for the purpose of this requirement. Food storage facilities can be provided in the kitchen in which a separate, lockable facility will be required for each occupant.

4 The space in a sink unit below the sink will not be accepted, ventilated or otherwise.

Preparation

5 A work top of sufficient size shall be provided in the kitchen.

Cooking

6 The kitchen shall be provided with a proper cooking appliance. The minimum acceptable will be:
   (a) two rings or hot plates together with either as grill or oven per occupant, or
   (b) a cooker with three or four rings or hot plates together with a grill and an oven per three occupants living in the house.

7 In a house occupied by five or less people, one cooking appliance with four rings or hot plates, together with a grill and an oven, will be sufficient.
Disposal of Waste Water

8 The kitchen shall be provided with its own sink complete with drainer and provided with its own continuous supplies of hot and cold running water. Sinks shall be provided in the ration of one sink per three occupants. The hot and cold running water shall be in the rental or charge for the accommodation.

9 In a house occupied by five or less people, one sink will be sufficient.

I Space Heating

1 All habitable rooms shall be adequately heated by a fixed space heating appliance of either gas or electricity; solid fuel should only be permitted on the ground floor where it can be shown that there is adequate fuel storage an no risk to safety from the removal of hot ashes. Use of the appliance will be exclusive (unless included in the rental or charge for the accommodation). Portable or removable heating appliances will not be acceptable.

2 All heating systems shall be of sufficient output so as to heat adequately the bedrooms and living rooms to a temperature of 65°F (18.3°C) with an outside temperature of 30°F(-1°C).

J Refuse, Storage and Disposal

1 Refuse storage containers shall be provided sufficient for the needs of the house and located on hardstanding with suitable access for cleansing of the area and removable of the container.

CATEGORY C HOUSES

A Space Standards

1 Bedrooms:

   All bedrooms to be as follows:

   1 person          6.5m²
   2 persons         10m²
   3 persons         16.5m²
   4 persons         21m²

2 Common Living Rooms:

   All common living rooms to be as follows:

   used by 1-5 persons 11m²
   used by 6-10 persons 16.5m²
   used by 11-15 persons 21.5m²
   used by 16+ persons  25m²

3 Dining Rooms and Kitchens:

   Should comply with the requirements of the Food Hygiene (General) Regulations 1990.

B Natural Lighting

1 All habitable rooms shall be provided with an area of clear glazing situated in either a window
and/or a door, equivalent in total area to at least 1/10th of the floor area of the room.

2 All kitchens, bathrooms and water closet compartments shall comply with B1 above. Where this is not practicable, adequate artificial lighting shall be provided in accordance with the requirements of Part C, to the satisfaction of the relevant officer.

All glazing to windows in bathrooms and water closet compartments shall be obscure.

3 All staircases, landings and passages shall be provided with an area glazing in a window. Where this is not practicable adequate artificial lighting shall be provided in accordance with the requirements of Part C, to the satisfaction of the relevant officer.

C Artificial Lighting

1 All habitable rooms, kitchens, bathrooms, water closet compartments, staircases, landings and passages shall be adequately lighted by electricity.

Time switches will only be allowed to common landings, passages and staircases and shall stay on for an adequate time to allow a person to climb stairs etc, and enter a room.

There shall be sufficient switches to operate the artificial lighting on each landing, corridor or passage and each switch should allow adequate lengths of corridors, passages and stairways to be illuminated at the same time.

D Ventilation

1 All habitable rooms, kitchens, bathrooms and water closet compartments shall have a minimum floor to ceiling height of 2.3m (7'6"), except in the case of existing attic rooms, which shall have a minimum height of 2.3m over an area of the floor equal to not less than half of the area of the room, measured on a plane 1.5m (5'0") above the floor.

2 All habitable rooms shall be ventilated directly to the external air by a window, the openable area of which shall be equivalent to at least 1/20th of the floor area of the room.

Neither an openable door giving access directly to the external air nor a louvred opening in such a door will be acceptable for the purpose of this requirement.

3 All bathrooms and water closet compartments shall comply with 2 above, but where this is not practicable, mechanical ventilation providing a minimum of three air changes per hour shall be provided. Such an installation shall be fitted with an overrun device for a minimum of 20 minutes and be connected to the lighting circuit of the room.

4 Kitchens shall comply with the requirements of the Food Hygiene (General) Regulations 1990.

5 Permanent means of ventilation in the form of a flue, airbrick, hit and miss ventilator or louvred window shall be provided in all dining/kitchens, kitchens, bathrooms, water closet compartments, and any other rooms containing either cooking and/or washing facilities.

E Water Supply

1 A supply of cold running water suitable for drinking purposes shall be provided for the use of the occupants at each washing point, and in the kitchen. Where the supply is provided at a common washing point, the tap shall be marked "Drinking Water".

2 The water supply shall be suitably protected from damage by frost.
F  Personal Washing Facilities

1 Each bedroom/study room, not occupied by the owner and his/her family, shall be provided with a wash hand basin together with its own continuous supplies of hot and cold running water, situated within the unit of accommodation, and of minimum dimension 560mm x 430mm.

2 Shared facilities will be accepted where there are two or less occupiers in addition to the owner-occupier and his/her family. Where the total number in the house exceeds six, separate facilities for each occupant other than the owner his/her family will be required in accordance with 1 above.

3 Each occupancy shall be provided with its own bath or shower, each in a proper room. Where this is not practicable a readily accessible bathroom or a shower room, being not more that one floor distant from any user, shall be provided in the following ratios;

   1-5 persons - 1 bathroom or shower room
   6-10 persons - 2 bathrooms or shower rooms

An owner-occupier and his/her family will be reckonable for this purpose.

Baths to be 1.67m in length; shower trays to be 800mm x 800mm and of a standard compatible with the authority's renovation grant specification.

The hot and cold water supplies shall be exclusive (unless the rental of charge for accommodation includes the supply of hot water), and available at all times.

4 Baths and showers shall not be provided in kitchens.

G  Drainage and Sanitary Conveniences

1 All above and below ground drainage shall comply with the requirements of the Building Regulations currently in force.

2 Each separate occupancy shall be provided with its own water closet compartment. Where this is not practicable, a readily accessible water closet compartment, being not more than one floor distant from each user, shall be provided in the following ratios:

   1-5 persons - 1 water closet
   6-10 persons - 2 water closets

External water closets shall not be reckonable for this purpose.

3 Each shared water closet shall be situated in a room separate from the bathroom or shower room.

4 A wash hand basin shall be provided in each separate water closet together with its own continuous supplies of hot and cold running water. The hot and cold water supplies shall be included in the rental or charge for the accommodation and available at all times.

H  Facilities for Storage, Preparation and Cooking of Food and for the Disposal of Waste Water

1 The facilities for preparation, cooking and serving food shall comply with the Food Hygiene
(General) Regulations 1990.

2 Facilities should be available, either separately or by use of the main kitchen, for occupants to prepare light meals and hot drinks etc. Any separate facility should comply with Part H of Category B.

I Space Heating

1 All habitable rooms shall be adequately heated by a fixed space heating appliance of either gas or electricity; solid fuel should only be permitted on the ground floor where it can be shown that there is adequate fuel storage and no risk to safety from the removal of hot ashes. Use of the appliance will be included in the rental or charge for the accommodation. Portable or removable heating appliances will not be acceptable.

2 All heating systems shall be of a sufficient output so as to heat adequately the bedrooms and living rooms to a temperature of 65°F (18.3°C) with an outside temperature of 30°F (-1°C).

J Refuse, Storage and Disposal

1 Refuse storage containers shall be provided, sufficient for the needs of the house and located on hardstanding, with suitable access for cleansing of the area and removal of the container.

CATEGORY D HOUSES

A Space Standards

1 Bedrooms (There shall be prominently displayed in each bedroom, a notice in all relevant languages, setting out the maximum number permitted to sleep in the room):

All bedrooms to be as follows:

<table>
<thead>
<tr>
<th>Persons</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8.5m²</td>
</tr>
<tr>
<td>2</td>
<td>11m²</td>
</tr>
<tr>
<td>3</td>
<td>15m²</td>
</tr>
</tbody>
</table>

For each additional person there should be an additional 4.5m² of floor area.

For the purpose of calculating these standards, a child under the age of one shall be disregarded, and a child more than one and less than 10 years of age shall count as ½ person.

2 Lounge:

A minimum provision of 3m² per person will be required.

3 Dining:

A minimum of 2m² per person will be required.

4 Combined Lounge/Dining Areas:

A provision of 4m² per person will be deemed to be adequate if the floor areas of lounge and dining rooms are combined.

5 Kitchens:

To be in accordance with the requirements of the Food Hygiene (General) Regulations 1990.
B Natural Lighting

1 All habitable rooms shall be provided with an area of clear glazing situated in either a window and/or a door, equivalent in total area to at least 1/10th of the floor area of the room.

2 All kitchens, bathrooms and water closet compartments shall comply with 1 above. Where this is not practicable, adequate artificial lighting shall be provided in accordance with the requirements of Part C, to the satisfaction of the relevant officer.

C Artificial Lighting

1 All habitable rooms, kitchens, bathrooms, water closet compartments, staircases, landings and passages shall be adequately lighted by electricity, none of which will be provided via a time switch, and shall be available at all times.

There shall be sufficient switches to operate the artificial lighting on each landing, corridor or passage and each switch should allow all corridors, passages and stairways to be illuminated at the same time.

D Ventilation

1 All habitable rooms, kitchens, bathrooms and water closet compartments shall have a minimum floor to ceiling height of 2.3m (7'6"), except in the case of existing attic rooms, which shall have a minimum height of 2.3m over an area of the floor equal to not less than half of the area of the room, measured on a plane 1.5m (5'0") above the floor.

2 All habitable rooms shall be ventilated directly to the external air by a window, the openable area of which shall be equivalent to at least 1/20th of the floor area of the room.

Neither an openable door giving access directly to the external air nor a louvred opening in such a door will be acceptable for the purpose of this requirement.

3 All bathrooms and water closet compartments shall comply with 2 above, but where this is not practicable, mechanical ventilation providing a minimum of three air changes per hour shall be provided. Such an installation shall be fitted with an overrun device for a minimum of 20 minutes and be connected to a lighting circuit of the room.

4 Kitchens provided in self-catering hostels shall comply with 4 above.

5 Kitchens provided in hostels where meals are provided shall comply with the Food Hygiene (General) Regulations 1990.

6 Permanent means of ventilation in the form of a flue, airbrick, hit and miss ventilator or louvred window shall be provided in all kitchens, bathrooms, water closet compartments and any other rooms containing either cooking and/or washing facilities.

E Water Supply

1 Each bedroom shall be provided with a supply of cold running water suitable for drinking purposes, either directly off the rising main or by such other means as are acceptable to the relevant water authority. Where this is not practicable and subject to the agreement of the relevant officer, such supply shall be provided at a tap accessible to each floor, but not in a bathroom or water closet compartment.
The tap shall be suitably marked “Drinking Water”.

2 The water pressure to all fitments shall comply with the minimum requirements laid down by the relevant water authority at all times.

3 All water supplies shall be suitably protected from frost damage.

F Personal Washing Facilities

1 Each bedroom shall be provided with a wash hand basin together with its own continuous supplies of hot and cold running water, and of minimum dimension 560mm x 430mm.

Where an en-suite bathroom is available, such wash hand basin may be provided in that bathroom.

In self-catering hostels, where a sink is provided to comply with the requirements of paragraph H1 (j) a separate wash hand basin will not be required.

2 A readily accessible bathroom or a shower room shall be provided on every floor where bedroom accommodation is located. The bath/shower shall be sited in a proper room and shall be provided in the following ratios for each occupied floor:

<table>
<thead>
<tr>
<th>Persons</th>
<th>Bathrooms or Shower Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>1</td>
</tr>
<tr>
<td>6-10</td>
<td>2</td>
</tr>
<tr>
<td>11-15</td>
<td>3</td>
</tr>
</tbody>
</table>

Baths are to be 1.67m in length; shower trays are to be 800mm x 800mm and of a standard compatible with the authority’s renovation grant specification.

The hot and cold water supplies shall be exclusive (unless the rental or charge for accommodation includes the supply of hot water), and available at all times.

G Drainage and Sanitary Conveniences

1 All above and below ground drainage shall comply with the requirements of the Building Regulations currently in force.

2 A readily accessible water closet compartment shall be provided on every floor where bedroom accommodation is located. The water closet shall be sited in a proper room and shall be provided in the following ratios for each occupied floor:

<table>
<thead>
<tr>
<th>Persons</th>
<th>Water Closets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>1</td>
</tr>
<tr>
<td>6-10</td>
<td>2</td>
</tr>
<tr>
<td>11-15</td>
<td>3</td>
</tr>
</tbody>
</table>

External water closets shall not be reckonable for this purpose. Additional water closet accommodation to the satisfaction of the relevant officer shall also be required to be provided on floors used for communal purposes.

3 Each water closet shall be situated in a room separate from the bathroom or shower room.

4 Separate male and female accommodation shall be required to the satisfaction of the Chief relevant officer.

5 Any water closet accommodation provided for the above purpose is to be exclusive of any
requirements under the Food Hygiene (General) Regulations 1990.

6 A wash hand basin shall be provided in each separate water closet together with its own supplies of hot and cold running water. The hot and cold water supplies shall be included in the rental or charge for the accommodation and available at all times.

H Facilities for Storage, Preparation and Cooking of Food and for the Disposal of Waste Water

1 Self-Catering Hostels:

(a) Each occupancy shall have its own kitchen separate from the sleeping room, and of an area of 4m². Where this is not applicable, each occupancy shall have its own kitchen facilities within the unit of accommodation and 4m² shall be added to the floor areas in A1.

(b) Shared kitchens may be provided for single person occupancies, but on the same floor as the accommodation provided for those people sharing a kitchen.

Food Storage

(c) Each separate occupancy shall be provided with a proper food store of adequate size ventilated to the external air, within the unit of accommodation. A refrigerator of at least 3.5ft³ shall be considered to be a proper food store for the purpose of this requirement.

(d) The space in a sink unit below the sink will not be accepted, ventilated or otherwise.

(e) Where shared kitchens are provided, each occupancy sharing shall have its own facility either within the unit of accommodation or in the kitchen. If in the kitchen, the facility shall be lockable.

Preparation

(f) Each separate occupancy shall be provided with a suitable work top.

(g) In shared kitchens a work top of sufficient size shall be provided.

Cooking

(h) Each separate occupancy shall be provided with a proper cooking appliance. The minimum acceptable will be:

(i) two rings or hot plates together with either a grill or oven for a one person unit of accommodation,

or

(ii) a cooker with three or four rings or hot plates together with a grill and an oven for units of accommodation for more than one person.

(i) In shared kitchens, one cooking appliance shall be provided for each user in accordance with H(i) above, or, a cooking appliance in accordance with H(ii) above shall be shared by not more than three one-person units.

Disposal of Waste Water

(j) Each separate occupancy shall be provided with its own sink complete with drainer and
provided with its own supplies of hot and cold running water.

(k) In shared kitchens, sinks shall be provided in the ratio of one sink per three one- person units of accommodation.

2 Hostels Providing Meals:

Kitchen Facilities

a) The facilities for preparation, cooking and serving food shall comply with the Food Hygiene (General) Regulations 1990, kitchen facilities for the cooking and preparation of food for residents as part of the service provided by the establishment shall not be allowed to be used by residents.

b) Separate provision for residents to prepare and cook their own food shall be provided within the property.

A suitable area for this purpose will be provided on each occupied floor and will contain the following facilities:

(i) cooker with four burners, oven and grill;
(ii) sink with constant hot and cold water supplies, properly connected to the drainage system;
(iii) four 13 amp electric power outlets;
(iv) a worktop of sufficient size.

c) Kitchen facilities for the purpose of (b) above shall be available for use 24 hours a day and the cost of running the appliances will be included in the residential charge.

d) Separate provision as required by (b) above will not be required in circumstances where it can be shown to the satisfaction of the relevant officer, either by virtue of the scale of their provision of meals or because of the manner in which the premises are occupied, that such provision would be excessive. In these cases a lesser standard may be applied.

I Space Heating

1 A fixed heating system capable of heating the room temperature to 65°F (18.3°C) shall be provided and properly fitted to all rooms. The system shall be capable of attaining this temperature when the outside temperature is 30°F (-1°C). The cost of running the heating system is to be included in the residential charge, and shall be under the exclusive control of the manager.

A full central heating system shall be deemed to be adequate for this purpose.

J Refuse, Storage and Disposal

1 Refuse storage containers shall be provided, sufficient for the needs of the hostel and of a type acceptable to the local authority. This will depend on the frequency of collection and it may well be that is necessary for the person having control to arrange for twice weekly collection of refuse. Storage facilities shall be hygienic and regularly maintained.

CATEGORY E HOUSES
Properties falling within this category one to comply with the relevant registration requirement of the Residential Homes Act 1984.

**CATEGORY F HOUSES**

A  Space Standards

1 Minimum floor areas for conversion of existing building's into self-contained flats

1 person, four roomed flat:
- Bedroom: 7m²
- Livingroom: 11.5m²
- Kitchen: 5.5m²
- Total habitable floor area: 24m²

1 person flatlet with separate kitchen:
- Bed/living room: 14m²
- Kitchen: 5.5m²
- Total habitable floor area: 19.5m²

1 person flatlet with separate bedroom:
- Bedroom: 7m²
- Kitchen/living room: 14.5m²
- Total habitable floor area: 21.5m²

2 person, one bedroom flat:
- Bedroom: 10.5m²
- Living room: 13m²
- Kitchen: 5.5m²
- Total habitable floor area: 29m²

2 Minimum floor areas for new-build self contained flats

1 person, four roomed flat:
- Bedroom: 7m²
- Living room: 11.5m²
- Kitchen: 5.5m²
- Total habitable floor area: 24m²

1 person flatlet with separate kitchen:
- Bed/living room: 14m²
- Kitchen: 5m²
- Total habitable floor area: 19m²

1 person flatlet with separate bedroom:
- Bedroom: 7m²
- Kitchen/living room: 14m²
- Total habitable floor area: 21m²

2 person, one bedroom flat:
- Bedroom: 10.5m²
- Living room: 13m²
- Kitchen: 5m²
- Total habitable floor area: 28.5m²
Further floor space standards for conversion of existing building into flats and for new build.

3 person, two bedroom flat:
- Main bedroom (not more than 2 persons) 10m²
- Second bedroom (single person) 7m²
- Living room 16m²
- Kitchen 7m²
- Total habitable floor area 40m²

4 person, three bedroom flat:
- Main bedroom (not more than 2 persons) 10m²
- Second and third bedroom (single person) 7m²
- Living room 18m²
- Kitchen 7m²
- Total habitable floor area 49m²

For a two bedroom, 4 person flat the bedroom floor space must comply with the main bedroom criteria.

All bedrooms, living rooms and bathrooms are to be directly accessible from a common access lobby and not from another room.

For any other combination of rooms these should be judged on the merits of the scheme within the approved standards and finally determined by committee of the local authority, if necessary.

Flats provided with more than one bedroom should provide bedrooms of minimum sizes in accordance with the relevant provisions above. In all cases "habitable floor area" is the useable floor area of any room used as a bedroom, living room, or kitchen. It does not include the area of any bathroom, staircase, passageway, landing or access lobby.

A General Requirements

Layout

1 All rooms shall be of useable shape and proportion. Furniture and fittings layouts are to be shown on any submitted plan and for this purpose the following assumptions are to be made:

Kitchens
- In addition to the items specified below, kitchens will be required to have space for an automatic washing machine.

Living Rooms or Living Room Areas
- Will be required to have space for a table and straight back chairs together with, for a single person unit, either three easy chairs or one easy chair and a two seater settee and for a two person unit, four easy chairs or two easy chairs and a two seater settee.

Bedrooms
- Space for either a single or double bed, as appropriate, a wardrobe, and either a bedside table or a dressing-table.

Furnishings and fittings are to be shown on plans submitted solely to demonstrate that the proposed scheme is workable. The fact that furniture and fittings are to be shown on the plan does not imply any requirement for them to be provided in the finished scheme or to be placed in the location shown on the plan.
2 All rooms shall have reasonable and suitable access and egress.

3 The design of entrances to flats is to be such that furniture may be reasonably transported into and out of them.

4 Any flatlet provided with a living kitchen shall have provision to separate the kitchen area from the living area. This will normally be in the form of a folding or sliding door although other forms of separation may be acceptable.

5 No bedroom or sleeping area shall open directly off a common area of the building.

6 The layout of any scheme shall be such that occupants of all flats have reasonable access to all common parts of the building.

7 Each flat shall be provided with a lockable post box situated on the ground floor in a suitable lobby except in circumstances where the main entrance door to each flat is separate and direct to the exterior.

8 The design and finish of all common parts to flat buildings shall be such as to permit easy maintenance and cleansing.

B Natural Lighting

1 All habitable rooms shall be provided with an area of clear glazing situated in either a window and/or a door, equivalent in total area to at least 1/10th of the floor area of the room.

2 Where practicable, all kitchens, bathrooms and water closet compartments shall be provided with windows in accordance with this standard, but where this is not practicable, adequate artificial lighting shall be provided.

3 All glazing to windows in bathrooms and water closet compartments shall be obscure.

4 Where practicable, all staircases, landings and passages shall be provided with an area of clear glazing in a window, but where this is not practicable, adequate artificial lighting shall be provided.

5 The design and location of window furniture shall be such as to permit its ready operation.

6 The use of french windows is discouraged for any room and their use should be prohibited in any room used as a bedroom.

C Artificial Lighting

1 All habitable rooms, kitchens, bathrooms, water closet compartments, staircases, landings and passages shall be adequately lighted by electricity.

2 The location of light-switches shall be appropriate to the nature and use of the area to be lit.

D Ventilation

1 All habitable rooms shall be ventilated directly to the external air by a window, the openable area of which shall be equivalent to at least 1/20th of the floor area of the room.
2 Neither an openable door giving access directly to external air nor an opening in such a door will be acceptable for the purpose of this requirement.

3 Where practicable, all kitchens, bathrooms and water closet compartments shall comply with this requirement but, where this is not practicable, mechanical ventilation providing a minimum of three air changes per hour shall be provided. Such an installation shall be fitted with an overrun device and be connected to the lighting circuit of the room.

4 Permanent ventilation in the form of a flue or air brick shall be provided to all kitchen areas, kitchens, bathrooms, and water closet compartments.

E Hot Water Systems

1 The hot water system must be capable of providing continuous hot running water to all facilities in the flat.

F Personal Washing Facilities

1 Any bathroom shall contain the full standard amenities which shall be laid out in such an arrangement that users of the bathroom have reasonable and comfortable access to all the facilities.

2 In addition to this, a free floor area of one sq m is to be provided in the bathroom, the shorter dimension being not less that 0.5 metres.

3 Water closets may be provided in separate rooms or compartments.

G Facilities for the Preparation and Cooking of Food

1 In addition to a fixed sink with drainer and a cooker point, each kitchen shall be provided with the following:

(a) a fixed working surface adjoining the sink unit on the side opposite to the drainer;
(b) fixed working surfaces on either side of and abutting the cooker position;
(c) a fixed working surface at least 900mm wide and 450mm in depth. This may, if desired, be one of the surfaces required by (a) or (b) above;
(d) fixed storage cupboards either below the working surfaces or wall-mounted above providing a minimum of 1.0 cubic metres of storage space;
(e) two double electric sockets, one of which is to be provided over the worktops;
(f) working surfaces shall be faced with heat resistant, laminated plastic material;
(g) the sink unit shall be of stainless steel and be fitted with proper overflow trap and waste pipe.

H Space Heating

1 Each flat shall be provided with a means of space heating in the form of either central heating, electric night storage heaters, or fixed gas fires.

2 The heating system which is provided shall be of a sufficient output so as to heat adequately all rooms in the flat and shall be capable of achieving temperatures of not less than 55°F (12.8°C) for kitchen, bedroom and circulation areas and 65°F (18.3°C) for living and dining areas with an outside temperature of 30°F (-1°C).
I Storage

1 Each flat shall be provided with a cupboard suitable for storage of small domestic cleaning equipment and appliances.

J Refuse Storage

1 Refuse containers shall be stored at the rear of the property on a hard standing, and be readily accessible for collection.

2 Refuse containers shall be readily accessible to all of the residents of the flats. For this purpose "readily accessible" shall mean either:

(i) All tenants having access, either through common parts or directly from their own accommodation, to the rear yard at ground level, or
(ii) The availability for use of all tenants of an entry or passageway leading to the rear yard which is directly adjacent to the property and is reached by a front or side door, or
(iii) Access by a staircase at the rear of the property leading to the rear yard, the use of which is available to all upper floor tenants, with all ground floor tenants having access as in (i) above. (This method is best suited in two storey properties having one flat on each of the ground and first floors). Planning permission is required for the erection of such staircases.

K Yards and Gardens

1 Without prejudice to any more specific requirements which may be imposed by any condition attached to planning permission, the design and finish of all common external areas shall be such as to enable them to be kept in a neat and tidy condition.

L Electrical Installations

1 All electrical installation shall comply with the current regulations of the Institution of Electrical Engineers as regards matters of safety and quality of workmanship.

M Means of Escape

1 Generally the design of the flats, escape routes and fire precaution standards should be in accordance with relevant legislation.
APPENDIX 2 - IDENTIFYING LOCAL CHARACTER MATRIX
# APPENDIX 2
## IDENTIFYING LOCAL CHARACTER MATRIX

<table>
<thead>
<tr>
<th>Identifying Local Character Matrix</th>
<th>Existing Character</th>
<th>Proposed Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THE LAYOUT OF BUILDINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block sizes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density (Number of dwellings per hectare)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THE LAYOUT OF STREETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The structure of the road system, i.e. grid system, cul-de-sac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road and pavement widths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connections, routes&lt;br&gt;How well connected is the local area? Are the connections to the proposed development better or worse?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plot sizes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THE POSITION OF THE BUILDINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The depth of the set back (from the back of the pavement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The width of the building frontages</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THE VISUAL EXPERIENCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levels of openness and enclosure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly visible buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height of buildings and number of storeys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building structure, e.g. terraced/semi-detached etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detail of buildings, e.g. materials, architectural detail, window and door styles/sizes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS
# APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2.</td>
<td>Street Hierarchy</td>
</tr>
<tr>
<td>2.1</td>
<td>Core Residential Streets</td>
</tr>
<tr>
<td>2.2</td>
<td>Regular Residential Streets</td>
</tr>
<tr>
<td>2.3</td>
<td>Minor Residential Streets</td>
</tr>
<tr>
<td>2.4</td>
<td>Home Zones</td>
</tr>
<tr>
<td>2.5</td>
<td>Shared Private Drives and Accesses</td>
</tr>
<tr>
<td>2.6</td>
<td>Private Streets</td>
</tr>
<tr>
<td>3.</td>
<td>Highway Design</td>
</tr>
<tr>
<td>3.1</td>
<td>Design Widths</td>
</tr>
<tr>
<td>3.2</td>
<td>Visibility</td>
</tr>
<tr>
<td>3.3</td>
<td>Junction Radii</td>
</tr>
<tr>
<td>3.4</td>
<td>Junctions</td>
</tr>
<tr>
<td>3.5</td>
<td>Horizontal Alignment</td>
</tr>
<tr>
<td>3.6</td>
<td>Vertical Alignment</td>
</tr>
<tr>
<td>3.7</td>
<td>Crossfalls</td>
</tr>
<tr>
<td>3.8</td>
<td>Turning Areas</td>
</tr>
<tr>
<td>3.9</td>
<td>Speed Restraint Measures</td>
</tr>
<tr>
<td>3.10</td>
<td>Road Signs and Markings</td>
</tr>
<tr>
<td>3.11</td>
<td>Footways</td>
</tr>
<tr>
<td>3.12</td>
<td>Provision for Cyclists</td>
</tr>
<tr>
<td>4.</td>
<td>Residential Parking</td>
</tr>
<tr>
<td>4.1</td>
<td>Off Street Car Parking Requirements</td>
</tr>
<tr>
<td>4.2</td>
<td>Off Street Cycle Parking Requirements</td>
</tr>
<tr>
<td>4.3</td>
<td>Domestic Drives</td>
</tr>
<tr>
<td>4.4</td>
<td>Garages</td>
</tr>
<tr>
<td>4.5</td>
<td>Parking between gables</td>
</tr>
<tr>
<td>4.6</td>
<td>Off Street Parking Rows</td>
</tr>
<tr>
<td>4.7</td>
<td>Parking Courts</td>
</tr>
<tr>
<td>4.8</td>
<td>Disabled Parking</td>
</tr>
<tr>
<td>4.9</td>
<td>Off Street Parking Summary</td>
</tr>
<tr>
<td>4.10</td>
<td>On Street Car Parking</td>
</tr>
<tr>
<td>4.11</td>
<td>Footway Crossovers</td>
</tr>
<tr>
<td>5.</td>
<td>Construction Standards</td>
</tr>
<tr>
<td>5.1</td>
<td>Capping Layer</td>
</tr>
<tr>
<td>5.2</td>
<td>Macadam Carriageway Construction</td>
</tr>
<tr>
<td>5.3</td>
<td>Macadam Footway Construction</td>
</tr>
<tr>
<td>5.4</td>
<td>Block Paved Carriageway Construction</td>
</tr>
<tr>
<td>5.5</td>
<td>Block Paved Footway Construction</td>
</tr>
<tr>
<td>6.</td>
<td>Drainage</td>
</tr>
<tr>
<td>6.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>6.2</td>
<td>Design of SuDS</td>
</tr>
<tr>
<td>6.3</td>
<td>Maintenance and Adoption of SuDS</td>
</tr>
<tr>
<td>6.4</td>
<td>Highways Drainage Design</td>
</tr>
<tr>
<td>6.5</td>
<td>Watercourses</td>
</tr>
<tr>
<td>6.6</td>
<td>Soakaways</td>
</tr>
<tr>
<td>6.7</td>
<td>Outfall and Headwalls</td>
</tr>
</tbody>
</table>
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

7. Adoption of Highways
   7.1 General Information
   7.2 Advanced Payment Code
   7.3 Section 38 - Pre Agreement Stage
   7.4 Section 38 - Post Agreement (Construction) Stage
   7.5 Section 278 Agreements
   7.6 Landscaped Areas

8. Network Management
   8.1 Works on the Public Highway
   8.2 Notices
   8.3 Mud on the Highway
   8.4 Health and Safety
   8.5 Public Utilities

9. Stopping up and Extinguishment
   9.1 Introduction
   9.2 Development Based Highway Orders
   9.3 Magistrate Based Orders

TABLES
1. Carriageway and Footway Widths
2. Stopping Sight Distances
3. Junction Radii
4. Junction Spacing
5. Centre Line Radii
6. Longitudinal Gradients
7. Vertical Curves
8. Vertical Measure Dimensions
9. Off-street Parking Dimensions
10. On-street Parking Dimensions
11. Macadam Carriageway Specification
12. Macadam Footway Specification
13. Block Paved Carriageway Specification
14. Block Paved Footway Specification

DIAGRAMS
1. Vertical Forward Visibility
2. Horizontal Forward Visibility
3. Visibility Envelope
4. Pedestrian Visibility
5. Vertical Curve Calculation
6. Standard Turning Head Detail
7. Tactile Paving Detail
8. Parking Row Detail
9. Parking Court Detail
10. Block Paved Carriageway Detail
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

1. Introduction

This *Guide to the Design of New Streets* provides a range of geometric parameters and legal requirements to assist Developers and their professional advisers, departments of the Council and other interested parties in the design of new, adoptable highways.

The document provides Developers with a flexible approach to the design of residential streets whilst achieving a safe, reliable, attractive and useable environment. These parameters have generally been derived from past experience as well as current technical standards and are strongly recommended in order to deliver an acceptable design.

The Authority is open to innovative ideas but these should hold the principles of workability, safety and future maintenance liability in mind. Any departures from the guidelines will need to be technically justifiable and be formally agreed by Sandwell’s Service Manager - Highways.

The guide is designed such that developments encouraging 20mph speed limits (and below) will benefit from relaxations within the design criteria.

2. Street Hierarchy

Determining the hierarchy of the streets in a new development is an important part of defining the character and feel of an area.

All streets will have a combination of ‘right of way’ and ‘right of place’ in varying amounts. Effective street design allows for some streets to become efficient vehicle conduits, whilst making others more amenable as local environmental spaces.

This approach will provide a real sense of balance between the different roles of streets required within as part of a new residential development.

Early discussions are recommended with the Highway Authority to agree an acceptable street hierarchy, which will greatly assist in the development of the detailed design.

2.1 Core Residential Streets

These roads will serve as the main access route for residential developments and small localised commercial centres, feeding them onto the existing local distributor network. They will carry domestic scale traffic and delivery and service vehicles. The occasional larger vehicle can be accommodated and it may also form part of a local bus route.

The street will generally have separate carriageway and footways. Where dwellings are to one side only, a single footway will be acceptable, with a service strip provided to the opposite side to accommodate underground services and street furniture.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Their design may have a target design speed of 30mph although 20mph limits would be encouraged and viewed more favourably.

Where new large residential developments are to be served off a single access point consideration should be given to ensure the core residential street is of sufficient width or of boulevard design up to the junction with the first adjoining residential street. This will ensure there is enough space to still allow vehicle access if partial closure is required in the future for statutory undertaker maintenance or emergency requirements.

2.2 Regular Residential Streets

The main function of regular residential roads is to give direct vehicular and pedestrian access to houses and recreational open space from the main core street.

These streets should be designed to carry domestic scale traffic and small delivery and service vehicles and will generally have separate carriageway and footways.

Where dwellings are to one side only, a single footway will be acceptable, with a service strip provided to the opposite side to accommodate underground services and street furniture.

Their design should have a target design speed of 20mph.

2.3 Minor Residential Streets

Minor residential streets will be limited to lightly trafficked routes primarily within residential areas.

Their design will generally have a maximum target design speed of 20mph but lower speeds should be encouraged.

Their design can be either in traditional form or more informal in layout but should maintain a clear delineation between vehicle and pedestrian spaces utilising kerbing, street furniture and landscaping.

Should shared spaces be proposed for minor residential streets then they should;

- Be able to accommodate the turning requirements of service and refuse vehicles
- Have well designed, useable and sufficient on and off street parking provision
- Provide true delineation of pedestrian spaces with measures in place to prevent vehicles from encroaching and parking within designated pedestrian routes.
- Be fully detailed and agreed by the Highway Authority prior to planning approval.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

2.4 Home Zones

Home Zones are streets that are designed to be used by the community for a range of activities as well as vehicles but will require;

- Provision of features to encourage community to use the street
- Target design speed of 10mph
- Home Zone signage to the entrance to the street

2.5 Shared Private Drives and Accesses

No more than 5 individual dwellings shall be served off a traditional style of shared private driveway.

Private drives or accesses should not exceed 25m in length if no suitable turning head is provided, large enough to accommodate a fire engine or refuse vehicle. Driveways over 25m in length will require suitable passing places to be provided for vehicles.

More than 5 individual dwellings can potentially be served of a private shared access, if parking is provided in the form of a closely associated parking court, rather than a more traditional style of shared private driveway. However this will be exclusively at the discretion of the Highway Authority.

Private driveways serving up to 5 dwellings and accesses to shared private car parking courts will remain unadopted and as such will require a management and maintenance plan to be submitted and agreed.

Shared accesses for car parks and parking courts cannot be used to jointly serve car parking for individual family dwellings. Family dwellings will need their own distinct drive or private access to provide full separation from any shared parking areas.

Private drives and accesses should have a means of way-finding for visually impaired people. In addition no surface water run-off will be allowed to cross the adopted highway and therefore consideration should be given to the use of permeable or porous surface materials or a form of captive drainage to delineate public and private areas.

2.6 Private Streets

Any access proposed to serve more than 5 dwellings, but to remain private, will need to be designed as a street in accordance with the parameters as set out for adoptable highways.

The private street will require a formed carriageway, pedestrian provision, street lighting, street drainage and a suitable turning head to accommodate at least a refuse vehicle or fire tender. The detailed design of any private street will require technical approval by the Highway Authority prior to construction.
### 3. Highway Design

#### 3.1 Design Widths

**Table 1 - Carriageway and Footway Widths**

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Carriageway Width</th>
<th>Footway Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Residential Road</td>
<td>6.5 m or 2 x 3.5 m Boulevard</td>
<td>2 @ 2.0 m</td>
</tr>
<tr>
<td></td>
<td>Up to the first junction within the site,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>where a single access to the development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is proposed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.5 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If two or more linked accesses are proposed.</td>
<td></td>
</tr>
<tr>
<td>Regular Residential Road</td>
<td>6.5 m</td>
<td>2 @ 2.0 m</td>
</tr>
<tr>
<td></td>
<td>If a proposed bus route.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.5 m</td>
<td>1 @ 2.0 m preferred, where</td>
</tr>
<tr>
<td></td>
<td>All other situations.</td>
<td>serving direct access to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dwellings.</td>
</tr>
<tr>
<td>Minor Residential Roads</td>
<td>4.8 m</td>
<td>1 @ 0.7 m hard service strip,</td>
</tr>
<tr>
<td></td>
<td>Absolute minimum.</td>
<td>where dwellings to one side</td>
</tr>
<tr>
<td></td>
<td></td>
<td>only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2 m absolute minimum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>footways may be used only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at the discretion of the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Highway Authority, where a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>small number of dwellings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>are to be served or space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>is limited.</td>
</tr>
<tr>
<td>Shared Private Drives &amp; Accesses</td>
<td>3.1 m</td>
<td>As required to provide</td>
</tr>
<tr>
<td></td>
<td>Minimum.</td>
<td>direct access to dwellings.</td>
</tr>
<tr>
<td></td>
<td>4.5 m</td>
<td>All pedestrian areas</td>
</tr>
<tr>
<td></td>
<td>Localised widening required at the</td>
<td>preferably 2.0 m but a</td>
</tr>
<tr>
<td></td>
<td>entrance to allow two cars to pass.</td>
<td>minimum of 1.2 m may be</td>
</tr>
<tr>
<td></td>
<td></td>
<td>used at the discretion of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Highway Authority.</td>
</tr>
</tbody>
</table>
3.2 Visibility

Unobstructed forward visibility will be checked at junctions, along the street and around bends. Visibility is measured horizontally and vertically.

Retaining long term forward visibility on developments will be secured either by part of the highway adoption process if deemed appropriate or through securing a covenant.

It should be noted that no soft landscaping or structures over 900mm in height will be accepted in Visibility Envelopes. Isolated obstacles such as street lighting columns, sign poles and street trees with a minimum clear stem of 2 m may be accepted at the discretion of the Highway Authority.

Table 2 - Stopping Sight Distances

<table>
<thead>
<tr>
<th>85th Approach speed</th>
<th>Stopping Sight Distance in m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume HGV/Bus &lt;= 5%</td>
</tr>
<tr>
<td>Mph</td>
<td>Kph</td>
</tr>
<tr>
<td>20</td>
<td>32</td>
</tr>
<tr>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>23</td>
<td>37</td>
</tr>
<tr>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>28</td>
<td>45</td>
</tr>
<tr>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>31</td>
<td>50</td>
</tr>
<tr>
<td>32</td>
<td>51</td>
</tr>
<tr>
<td>33</td>
<td>53</td>
</tr>
<tr>
<td>34</td>
<td>54</td>
</tr>
<tr>
<td>35</td>
<td>56</td>
</tr>
<tr>
<td>36</td>
<td>58</td>
</tr>
<tr>
<td>37</td>
<td>59</td>
</tr>
</tbody>
</table>

Derived from SSD = vt + v²/2(d+0.1a) as published in ‘Manual for Streets 2 - Wider Application of the Principles’

- v = speed (m/s)
- t = driver perception-reaction time (seconds)
- d = deceleration (m/s²)
- a = longitudinal gradient (%) (+ for upgrades and - for downgrades)
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Forward Visibility

Visibility should be checked in the vertical plane to ensure that views in the horizontal plane are not compromised by obstructions such as the crest of a hill or at a dip in the road ahead. It should take into account both the variation in driver eye height and the height range of obstructions.

Eye height is assumed to range from 1.05 m (for car drivers) to 2.0 m (for bus and HGV drivers). Drivers need to be able to see obstructions from 2 m high down to a point 600 mm above the carriageway. The latter dimension is used to ensure small children can be seen.

The SSD’s given in Table 2 relate to the position of the front of a vehicle. However generally the distance between a driver and the front of a vehicle can be 2.4 m and therefore it is recommended that for assessments of forward SSD, an allowance is made by adding 2.4 m to the SSD distances in Table 2.

Visibility at Junctions

Visibility at junctions will be measured from a distance 2.4 m (X) into the side road junction, at a point 600mm above the carriageway in the approximate location an approaching driver would be sat.

Distance Y will be measured as the appropriate Stopping Sight Distance taken from Table 2, at a point 1.5 m from the nearside kerb to represent the front position of an approaching vehicle.

Alternative left hand visibility splay if vehicles approaching form the left are unable to cross the centre line
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Visibility around Bends

The minimum forward visibility required is equal to the minimum SSD shown in Table 2, based on the design speed at the location. The forward visibility is measured along the centre of the inside lane at regular intervals to create a Visibility Envelope, measured in both the horizontal and vertical planes.

Pedestrian Visibility

The safety of pedestrians is paramount in any residential design. Visibility of pedestrians when crossing private driveways and access ways should be considered and an Intervisibility Splay of 2m by 2m must be provided. Standard visibility splays from Table 2 must still be achieved for approaching vehicles. No soft landscaping or structures over 900mm in height will be accepted in pedestrian Intervisibility Splays to ensure children are clearly visible.

Off-Highway Cycle Paths

The minimum required forward visibility for cyclists at the junction of off-highway cycle paths and trafficked streets should be based on Minimum SSD of 25m for Local Distributor Routes and 15m all other routes.

(Derived from Local Transport Note 2/08, Cycle Infrastructure Design)
3.3 Junction Radii

The minimum corner radii at residential junctions will be dependent on traffic speeds on the major arm, traffic flow on the minor arm, road widths, the largest vehicle intended to use the street on a regular basis and on street parking provision.

As far as possible within the residential environment, corner radii should be minimised in order to reduce speeds and create safer crossings for pedestrians. However consideration should be given to allowing vehicles to make unobstructed manoeuvres without the need to over-run footways.

Table 3 - Junction Radii

<table>
<thead>
<tr>
<th>Major Arm</th>
<th>Minor Arm</th>
<th>Minimum Junction Radii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Speed</td>
<td>Type</td>
</tr>
<tr>
<td>Residential Commuter</td>
<td>30 mph</td>
<td>Core Residential Street</td>
</tr>
<tr>
<td>Core Residential Street</td>
<td>30 mph</td>
<td>Regular Residential Street</td>
</tr>
<tr>
<td></td>
<td>20 mph</td>
<td></td>
</tr>
<tr>
<td>Regular Residential Street</td>
<td>30 mph</td>
<td>Regular Residential Street</td>
</tr>
<tr>
<td></td>
<td>20 mph</td>
<td></td>
</tr>
<tr>
<td>Regular Residential Street</td>
<td>30 mph</td>
<td>Minor Residential Street or Home Zone</td>
</tr>
<tr>
<td></td>
<td>20 mph</td>
<td></td>
</tr>
</tbody>
</table>

The minimum radii given above should be considered in conjunction with the ability for vehicles to turn at junctions.

Where minimum radii are proposed the Highway Authority will require vehicle tracking to be provided for the largest proposed turning vehicle, to ensure they can manoeuvre unhindered.

Generally this will be a refuse vehicle and Sandwell’s current largest fleet refuse vehicle measures 8.3 m x 2.49 m.

Tests should include for Refuse Vehicles and particular attention should be given to ensuring any swept paths are kept clear from parking and other obstructions, to ensure footways are not encroached to protect pedestrian safety and limit longer term maintenance liabilities.
3.4 Junctions

Spacing

The minimum required junction spacing is dependent on the proposed speed limit of the major street.

Table 4 - Junction Spacing

<table>
<thead>
<tr>
<th>Speed</th>
<th>Junction Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opposite</td>
</tr>
<tr>
<td>30 mph</td>
<td>20m</td>
</tr>
<tr>
<td>20 mph</td>
<td>15m</td>
</tr>
</tbody>
</table>

Crossroads

Non-signalised crossroad junctions will only be acceptable when all approaching arms are designed to 20mph. Crossroads between 30mph streets will not normally be acceptable.

It is likely that any proposed crossroad junction will need to be protected through traffic calming in the form of raised tables to ensure a 20mph limit is achieved. In addition the standard requirements for visibility and corner radii will apply.

If the junction is traffic calmed, the requirement for road markings may be removed at the discretion of the Highway Authority.

Roundabouts

Conventional roundabouts are not generally appropriate for residential developments as they provide precedence for vehicles over pedestrians.

Mini roundabouts may be considered at junctions, but generally only where flows are relatively balanced across all arms. However consideration should be given to the amount of signing and lining required for mini roundabouts and the visual obstruction they cause.

Squares

On streets designed to 20mph or below, informal squares may be considered in place of crossroad junctions. Consideration should be given to traffic calming the entrances to any proposed square and providing protection to prevent vehicles overrunning footways or parking inappropriately.

Physical features such as street trees, furniture, lighting and bollards may be required to define vehicle and pedestrian paths through any square areas. In addition changes of material and colours may also be used to define squares and differing uses within the square.
3.5 Horizontal Alignment

Centreline Radius

The minimum required centreline radius is dependent on the proposed designed speed limit of the street.

Table 5 - Centre Line Radii

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Design Speed</th>
<th>Minimum Centre Line Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Residential Streets Regular Residential Streets</td>
<td>30mph</td>
<td>20m</td>
</tr>
<tr>
<td>Core Residential Streets Regular Residential Streets</td>
<td>20mph</td>
<td>16m</td>
</tr>
<tr>
<td>Minor Residential Streets</td>
<td>20mph</td>
<td>10m</td>
</tr>
<tr>
<td>Home Zones</td>
<td>10mph</td>
<td>No minimum To be tested through</td>
</tr>
</tbody>
</table>

Widening on Curves

Generally on 20mph streets of reduced width there may be a need for widening on curves and bends.

Any widening should be designed to accommodate;
- Two cars passing each other
- A refuse vehicle passing a parked vehicle
- A refuse vehicle utilising the whole carriageway where measures exist to stop on street parking around the curve.
- On a proposed bus route, a single decker bus utilising the whole carriageway where measures exist to stop on street parking around the curve.

Any design will need testing through tracking software and the results made available to the Highway Authority for acceptance.

Over run areas where widening is required will not generally be acceptable in residential developments due to problems with long term maintenance liabilities and pedestrian amenity.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

3.6 Vertical Alignment

Longitudinal Gradients

Table 6 - Longitudinal Gradients

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Longitudinal Gradient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum</td>
</tr>
<tr>
<td>All Residential Streets</td>
<td>1 in 15 (8.3%)*</td>
</tr>
<tr>
<td>Footways</td>
<td>1 in 12 (8.3%)</td>
</tr>
<tr>
<td>Private Drives</td>
<td>1 in 10 (10%)</td>
</tr>
</tbody>
</table>

*Note that on the minor arm approach to junctions a maximum up or down gradient of 1 in 20 (5%) should be provided, for a minimum distance of 10m from the Give Way line before any transition to a steeper gradient.

Vertical Curves

Vertical curves will be required at all changes of gradient.

They should be calculated using the formula \( L = KA \) where;

\( L = \) horizontal length of curve in metres
\( A = \) algebraic difference in the gradients
\( K = \) Constant.

The value of \( K \) varies depending on the design speed proposed.

![Diagram 5 - Vertical Curve Calculation](image)

Table 7 - Vertical Curves

<table>
<thead>
<tr>
<th>Design Speed</th>
<th>Constant K</th>
<th>Minimum Length of Curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>20mph</td>
<td>1.0</td>
<td>10m</td>
</tr>
<tr>
<td>30mph</td>
<td>4.0</td>
<td>25m</td>
</tr>
</tbody>
</table>
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

3.7 Crossfalls

Carriageways can have either a balanced camber or direct crossfall profile to a gradient of 1 in 40 (2.5%)

Footways should be designed to a 1 in 40 (2.5%) crossfall, with a maximum 1 in 12 (8.3%) crossfall at pedestrian and driveway crossings.

3.8 Turning Areas

Where possible turning areas should be avoided by the use of well designed and interconnected road networks.

Turning areas must be provided at the end of each cul-de-sac and designed to accommodate the largest type of vehicle likely to use the facility on a regular basis. In residential streets this is most likely to be a refuse truck with wheelie bin lifting facilities or a fire engine. To assist in design, Sandwell’s current refuse vehicle measures 8.3m x 2.49m.

To enable any proposed turning area to be useable and effective, the turning head must be kept clear from parked vehicles by providing an adequate number of attractive and appropriately sized resident parking facilities to ensure they are used in preference to on street parking.

Any turning facility where footways are not proposed around the whole perimeter must have a minimum 0.7 m service strip provided beyond the kerb face. This will protect any fences, hedges or other features and avoid damage from vehicle overhang whilst turning. This service strip must be hard landscaped and constructed to adoptable standards.

Although standard turning areas are shown below developers may provide innovative and amorphous designs as long as proof is provided that a refuse vehicle swept path can be accommodated.

Diagram 6 - Standard Turning Head Detail

W From Table 1
R From Table 3
3.9 Speed Restraint Measures

It is expected that for developments with a 20mph design speed, traffic calming measures will be required to help ‘self-enforce’ the proposed limit. This does not preclude their use on 30mph streets where they can be used effectively to deter inappropriate traffic speeds.

Any proposed traffic calming should be designed as an integral part of the street environment from the start and not be considered as an add on at a later date.

Vertical measures

Vertical measures such as speed tables, flat top humps and cushions are very effective at controlling traffic speeds.

In particular, the use of tables at junctions and full kerb-to-kerb flat top speed humps will be encouraged as they not only control vehicle speed but greatly aid pedestrian amenity through providing level and safe crossing areas.

Table 8 - Vertical Measure Dimensions

<table>
<thead>
<tr>
<th>Type</th>
<th>Height</th>
<th>Length of Ramp</th>
<th>Minimum length of Flat Top</th>
<th>Maximum Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Table Proposed Bus Route</td>
<td>75mm</td>
<td>1.125m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Speed Table</td>
<td>75mm</td>
<td>1.0m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Flat Top Speed Hump Proposed Bus Route</td>
<td>75mm</td>
<td>1.125m</td>
<td>6.0m</td>
<td>70m</td>
</tr>
<tr>
<td>Flat top Speed Hump</td>
<td>75mm</td>
<td>1.0m</td>
<td>2.5m</td>
<td>70m</td>
</tr>
<tr>
<td>Speed Cushion</td>
<td>75mm</td>
<td>Recommended 3.5m long x 1.8m wide with 1 in 8 (12.5%) ramps on each edge</td>
<td>70m</td>
<td></td>
</tr>
</tbody>
</table>

Horizontal Measures

Traditional ‘stick on’ give and take style features will not generally be supported as any proposed carriageway narrowings will need to be designed as an integral part of any streetscape. Their use should not be over utilised and provided as a simple add on speed restraint measure.

Any narrowing should be to one side only and provide a minimum 3.8m clear carriageway width where cyclists and cars need to pass, or 4.0m on identified Bus routes. Where bypass cycle lanes are provided the carriageway may be reduced to a minimum 3.25m.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

The length of any narrowing should be kept to 10m maximum to ensure any narrowings do not unduly affect resident parking amenity and manoeuvrability out of parking spaces and driveways.

Carriageway narrowings can be used to encourage pedestrian crossing through the use of drop kerb crossings. Street tree planting and bollards can be incorporated into any design to emphasise the speed reduction effect and aid in keeping the area clear of inappropriate parking.

On-street parking bays may also be used to promote low speeds and give the impression of narrower streets. Greater detail regarding on-street parking can be found in Section 4.9.

Developers should note that the Highway Authority will not adopt any areas of dedicated on-street parking specifically reserved for individual properties.

Other Techniques

Changes in surface textures and colours can greatly assist in changing drivers’ perceptions of different areas within a development. Particularly useful when used in shared spaces and at squares or junctions. However consideration must be given to the points discussed in Section 2.3 if shared spaces are being proposed.

The omission of carriageway markings in appropriate areas can also assist in suppressing vehicle speeds but must not be done where road safety may be compromised and removed only with the prior agreement of the Highway Authority.

Traffic Regulation Orders

Where any traffic regulation orders (TRO) are required to form 20mph speed limits, prohibition of driving and parking restrictions as part of any new development, it is Sandwell MBC’s responsibility to undertake the necessary process on behalf of, and at the expense of, the developer.

The developer should formally request the Authority to commence the process at the point where any roads are completed to Part 1 (Section 38) standard and become highways along which people can pass.

Traffic Regulation Orders can take up to 4 months to complete and no roads will be accepted for adoption until all measures are complete, any appropriate road lining and signing is in place and any TRO process has been completed and sealed. Therefore the onus is on developers to instigate the process at the earliest opportunity.

The developer should clearly show traffic calming measures, restriction of movement (one-way, turning bans etc) and any associated road signing on any plans used for sale purposes. This will ensure future residents are fully aware of the scope of the works and will help reduce the potential for objections when any Order is formally advertised.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

3.10  Road Signs and Markings

All new traffic signs and road markings will be designed and installed in accordance with the latest and current version of ‘The Traffic Signs Regulations and General Directions’ and any addendums and amendments.

When designing for road signs developers should not ‘over engineer’ a scheme and look, where possible, to reduce the amount of new infrastructure being provided. This will retain an uncluttered and pleasant street scene whilst limiting longer term maintenance liabilities.

For example, it is recommended that all new developments proposing a 20mph design speed should be considered as 20mph zones in preference to 20mph limits as this will substantially reduce the amount of road signs required.

Where road signs require illumination, Sandwell MBC will provide their current specification on request, in relation to illumination requirements, pole specification and electrical requirements. Sandwell now actively supports the use of low energy, long life alternatives and developers will be encouraged to utilise this technology.

The procurement and erection of street nameplates will be the responsibility of the developer. Sandwell MBC will determine the street names and house numbering system for any new development and also provide the design specification for street name plates on request.

The location of any new road sign infrastructure must be clearly identified to potential house buyers to avoid any unnecessary complaints and objections once the signs are erected.

3.11  Footways

In general, footways should be a minimum 2.0m wide and be provided wherever dwellings are to be directly accessed or desire lines will be established. In certain areas footways may be reduced to 1.2m absolute minimum width, but only with the approval of the Highway Authority.

Footways should be clearly defined and provide an identifiable pedestrian route distinct from the carriageway. This is generally achieved by the use of a physical kerb, although shared spaces may be considered, but only if they are carefully designed, satisfy the criteria in Section 2.3 and are agreed by the Highway Authority at the earliest opportunity.

Off carriageway footway links will only be adopted if they join two existing (or proposed) adoptable footways, have adequate street lighting and are construction to adoptable standards.

Wider footway widths should be considered in locations where pedestrians congregate or densities are higher, such as bus stops, outside retail premises, at school entrances and at community venues.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Footways should be designed to be free from obstructions other than localised items such as lighting columns, road signs and utility boxes. Care should be given to provide the requisite pedestrian visibility splays where footways cross private driveways and shared accesses. Any proposed street planting should be designed as not to unduly affect the safe use of the footway or force pedestrians into the carriageway.

Drop crossings and tactile paving should be provided at all junctions and informal crossing points, in accordance with the DfT’s latest ‘Guidance on the Use of Tactile Paving’.

Tactile paving at all informal crossing points will be buff in colour and can be either concrete paving slabs or epoxy resin bonded stick-on units. In areas of high quality paving, black tactile paving or brass studs may be used as an alternative, but only if sufficient contrast is provided.

Any tactile paving should be provided as 2 full rows back from the kerb and 1.8m wide. To avoid unnecessary cutting it is suggested 450mm square tactile units are used. Drop crossing should be laid at no steeper than 1:12 crossfall although shallower gradients would be encouraged.

![Diagram 7 - Tactile Paving Detail](image)

3.12 Provision for Cyclists

The needs of cyclists should be considered from the outset of any new development and be fully integrated within any design. Developers should consider appropriate cycle access, routes, circulation, storage and parking as integral parts of any new project and they should not simply be added on as an afterthought.

Sandwell’s ‘Cycling Supplementary Planning Guidance’ provides more detailed advice on planning policy and design and is a material consideration in the planning process. Therefore any new developments will be expected to reflect the contents of the guidance, which can be found at [www.sandwell.gov.uk/downloads/file/1229/cycling_spd](http://www.sandwell.gov.uk/downloads/file/1229/cycling_spd).

On Street Provision

Cyclists should, wherever possible, be accommodated on carriageways without special provision, based on recommendations in LTN2/08 ‘Cycle Infrastructure and Design’.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

In lower trafficked 20mph residential streets vehicles should be able to pass cyclists by moving into the opposing lane. However, care must be taken when designing carriageway narrowings to ensure the width is sufficient for a car and a bicycle to pass (generally 3.8m but 4.0m if on a bus route), or bypass cycle lanes are provided where this is not possible.

The need for any on-street cycleways in 30mph streets should be assessed with the guidance in LTN2/08. Cycle lanes may be implemented where cycling is to be encouraged to key destinations within a development or the surrounding network. However short lengths of isolated cycleways should be avoided where they would lead to confusion and limited use.

Generally, single one-directional on-street cycle lanes should be a minimum of 1.5m although an absolute minimum of 1.2m may be used at the discretion of the Highway Authority.

Off Highway Cycle and Pedestrian Paths

Off-road routes can be important for providing direct routes through heavily trafficked areas, linkages between housing areas, shops and other facilities, and as leisure routes. They should be located where they will be most utilised and provide a functional route between places.

Off highway cycle links not intended for pedestrians should have a minimum width of 2.5m for two way traffic. Construction of any off highway cycleway, segregated and shared paths will be consistent with those for footways as shown in Section 5.4.

Where a segregated pedestrian/cycle off highway route is proposed, there should be a distinct delineation of the pedestrian and cyclist areas, either through the use of corduroy paving and lining or a physical kerb. The minimum width for any segregated pathway is 3m, although wider paths would be encouraged where space allows.

Shared pedestrian/cycle pathways should only be considered where segregated routes cannot be provided due to space constraints. A minimum width of 2.5m should be considered for shared pathways.

Any proposed off road pathways should avoid tight turns and steep gradients. The surrounding vegetation or landscaping needs to be chosen so as not to intrude on the route and become a future maintenance liability.

Consideration should be given to appropriate street lighting of any off highway pathway. If any pathway is to be considered for adoption, Sandwell MBC will provide their current lighting specification on request, in relation to illumination, pole specification and electrical requirements.

In addition any required lining and signing should be in accordance with the latest version of ‘The Traffic Signs Regulations and General Directions’.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

4. Residential Parking

The design of safe, useable and attractive residential car parking is a key element in the provision of any new development. If parking is too narrow or perceived to be vulnerable and unsafe, residents will inevitably park on street as close to their property as possible.

This practice leads to unsightly, vehicle dominated street scenes and causes problems for the free passage of service and emergency vehicles as well as interfering with pedestrian amenity.

The standards presented below have been arrived at through recent experiences and have been determined to provide useable parking provision for modern day vehicles and families.

When designing parking provision it should be noted that no on-street parking, parking court access or private driveway will be allowed within 10m of any junction.

Forward visibility requirements for domestic drives, off street spaces and parking court accesses are consistent with those given in Section 3.2.

Developers should also consider the need for residential cycle parking and storage from the outset and fully integrate the provision into any design.

4.1 Off Street Car Parking Requirements

Residential

<table>
<thead>
<tr>
<th>Properties</th>
<th>Dedicated parking spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 2 Bedroom</td>
<td>1</td>
</tr>
<tr>
<td>3 to 4 Bedroom</td>
<td>2</td>
</tr>
<tr>
<td>5 to 6 Bedroom</td>
<td>3</td>
</tr>
<tr>
<td>7 to 8 Bedroom</td>
<td>4</td>
</tr>
</tbody>
</table>

Visitor

<table>
<thead>
<tr>
<th>Properties</th>
<th>Spaces per properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development less</td>
<td>1 per 3 properties</td>
</tr>
<tr>
<td>Development 10 or</td>
<td>1 per 4 properties</td>
</tr>
<tr>
<td>more properties</td>
<td></td>
</tr>
</tbody>
</table>

At the discretion of the Highway Authority, consideration may be given to reducing off-street visitor parking provision if spaces can be safely accommodated on street without unduly affecting the amenity of residents, the movement of pedestrians and the free passage of vehicles.

4.2 Off Street Cycle Parking Requirements

<table>
<thead>
<tr>
<th>Properties</th>
<th>Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bedroom</td>
<td>1 cycle</td>
</tr>
<tr>
<td>2 to 3 Bedroom</td>
<td>2 cycle</td>
</tr>
<tr>
<td>4 to 5 Bedroom</td>
<td>3 cycle</td>
</tr>
</tbody>
</table>

In apartment schemes, cycle storage can either be communal within the building structure or provided within the grounds as long the storage is secure, undercover and at ground level.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Homes with garages will be deemed to have adequate secure storage facilities within the garage, as long as Sandwell’s recommended garage dimensions are provided.

In homes without garages, consideration should be given to providing secure under cover storage within the property’s own amenity space.

4.3 Domestic Drives

Driveway to an individual property should be no less than 2.8m in width to allow for comfortable use by modern day vehicles and families. If the parking space is also to include the pathway to the front door of the dwelling, the driveway must be widened accordingly.

The minimum length of any driveway is 5.0m. However parking spaces in front of a garage should be a minimum length of 5.5m to accommodate garage door opening whilst vehicles can still park on the drive without overhanging the footway.

Where parking spaces are immediately to the front of dwellings, a clear 1.0m amenity space is required between the end of the driveway and the property frontage.

4.4 Garages

The minimum internal floor area for garages should be 2.8 x 6.0m to accommodate a variety of vehicle sizes whilst allowing room for general storage, utility apparatus and wheelie bin storage.

Garages smaller than 2.8 x 6.0m will not be considered as a useable parking space for parking allocation purposes.

4.5 Parking between gables

Parking provision between gables should provide spaces that are comfortable and useable to avoid unnecessary on street parking. They should be wide enough to allow for residents to load and unload vehicles whilst considering the proximity of boundary edges and other parked vehicles.

Minimum space required 2.8 x 5.0m single or 5.6 x 5.0m side by side driveways.

4.6 Off Street Parking Rows

Where linear rows of perpendicular parking are proposed to the front of dwellings, adjoining the public highway, there should be a 1.8m wide break provided every 3 spaces to provide opportunities for pedestrians to walk past in safety. Breaks every 4 spaces may be allowable in some places, depending on the site location, pedestrian densities and traffic movements, but only at the discretion of the Highway Authority.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

The minimum manoeuvring width to the rear of any parking space is 6m. This space can be provided by the adjacent footway and carriageway.

In parking rows, all spaces are to be a minimum 2.8m x 5.0m to encourage use in preference to on street parking.

![Diagram 8 - Parking Row Detail]

4.7 Parking Courts

Resident parking courts should be designed to be useable, attractive, well lit and provide a sense of security, to ensure residents are encouraged to use them in preference to on street parking.

Large expansive parking courts will be not be favoured and developers should promote smaller courts, serving a small number of properties, to encourage residents to take ownership and make full use of the area.

In parking courts, all spaces to be a minimum 2.8m x 5.0m to encourage use in preference to on street parking. The minimum manoeuvring width to the rear of any parking space and between rows is 6.0m.

In addition a service strip or buffer zone of 0.5m should be provided between any parking spaces and boundary fences, walls or buildings around the perimeter of the parking area.

![Diagram 9 - Parking Court Detail]
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

4.8 Disabled Parking

In car parks serving multi occupancy dwellings, apartments blocks, community facilities or schemes specially designed for disabled or elderly residents, disabled parking bays should be considered.

If required, 5% of the total parking capacity should be designated for disabled users.

Minimum disabled space required 3.6 x 5.0m with an additional clear 1.2m safety zone to the rear of the space.

4.9 Off Street Parking Summary

Table 9 - Off Street Parking Dimensions

<table>
<thead>
<tr>
<th>Location</th>
<th>Width</th>
<th>Length</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway Space</td>
<td>2.8m</td>
<td>5.0m</td>
<td>1.0m clear amenity space to frontage of property</td>
</tr>
<tr>
<td>Tandem space in front of garage</td>
<td>2.8m</td>
<td>5.5m</td>
<td></td>
</tr>
<tr>
<td>Garage</td>
<td>2.8m</td>
<td>6.0m</td>
<td>Any less then can not be classified as a parking space</td>
</tr>
<tr>
<td>Between Gables</td>
<td>2.8m (Single)</td>
<td>5.6m (Double)</td>
<td>5.0m</td>
</tr>
<tr>
<td>Parking Rows</td>
<td>2.8m per space</td>
<td>5.0m</td>
<td>1.8m break after every 3 spaces</td>
</tr>
<tr>
<td>Parking Courts</td>
<td>2.8m per space</td>
<td>5.0m</td>
<td>0.5m buffer zone around parking rows</td>
</tr>
<tr>
<td>Disabled Space</td>
<td>3.6m</td>
<td>5.0m + 1.2m rear safety zone</td>
<td></td>
</tr>
</tbody>
</table>
4.10 On Street Car Parking

Intensive on street residential parking will be discouraged and any on street provision should be considered mainly for visitor and service use.

On street parking spaces provided on the public highway cannot be specifically allocated to individual dwellings.

Careful consideration needs to be given to providing adequate room to the rear of any spaces for manoeuvrability. The clear space required will vary depending on the type of parking proposed.

<table>
<thead>
<tr>
<th>Parking Style</th>
<th>Space Width</th>
<th>Space Length</th>
<th>Rear Manoeuvring Space *</th>
</tr>
</thead>
<tbody>
<tr>
<td>90º</td>
<td>2.8m</td>
<td>6.0m</td>
<td>6.0m</td>
</tr>
<tr>
<td>60º Echelon</td>
<td>4.2m</td>
<td>5.0m</td>
<td>4.2m</td>
</tr>
<tr>
<td>45º Right Angle</td>
<td>3.6m</td>
<td></td>
<td>3.6m</td>
</tr>
<tr>
<td>Parallel</td>
<td>2.0m minimum</td>
<td>6.0m</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Where parking is provided on-street, the rear space required to manoeuvre in & out of parking spaces will generally be provided by the carriageway and adjoining footway. Where road widths are limited, reductions of this manoeuvring space may be achieved by providing wider parking spaces, but only at the discretion of the Highway Authority.

4.11 Footway Crossovers

Footway crossovers maintain pedestrian provision across the mouth of minor junctions and driveways, creating an environment where drivers consider they are moving across a space where pedestrians can expect to have priority.

Footway crossovers are suitable for serving private drives, minor residential streets where pedestrian priority is required along the major arm, minor accesses to parking courts, and commercial premises.

Excessive lengths of footway crossovers should be avoided, Section 4.6, and inter visibility splayes should be maintained at all times, Section 3.2.
5. **Construction Standards**

The construction standards presented below are not intended to be fully comprehensive and represent those that Sandwell MBC would usually accept and encourage on a majority of ‘standard’ developments.


5.1 **Capping Layer**

In order to design the carriageway construction, the California Bearing Ratio (CBR) at natural formation level needs to be determined by using the CBR test in accordance with BS 1377.

These tests must be taken in areas pre-agreed with the Highway Authority. If the CBR value is less than 5% then a capping layer will be required, the thickness of which will be determined by the CBR value.

In some circumstances a capping layer may be required where CBR values are greater than 5% as a whole but visual inspection identifies localised issues.

Any proposed capping layer shall comply with MCHW Table 6/1; Type 6F2. The Highway Authority reserves the right to request testing of any materials on site, at the developer’s cost, to ensure compatibility with the specification.

5.2 **Macadam Carriageway Construction**

Materials are to be supplied and laid in accordance with BS EN 13108.

**Table 11 - Macadam Carriageway Specification**

<table>
<thead>
<tr>
<th>Laying Course</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Course Hot Rolled Asphalt or SMA</td>
<td>40mm</td>
</tr>
<tr>
<td></td>
<td>10mm nominal size</td>
</tr>
<tr>
<td>Binder course - Asphaltic concrete</td>
<td>50mm</td>
</tr>
<tr>
<td>(Dense Bitumen Macadam)</td>
<td>20mm nominal size</td>
</tr>
<tr>
<td>Base Course - Asphaltic concrete</td>
<td>100mm</td>
</tr>
<tr>
<td>(Dense Bitumen Macadam)</td>
<td>32mm nominal size</td>
</tr>
<tr>
<td>Sub Base Type 1 Stone (MCHW clause 8)</td>
<td>225mm*</td>
</tr>
<tr>
<td>Capping Layer</td>
<td></td>
</tr>
<tr>
<td>CBR &lt; 2%</td>
<td>600mm</td>
</tr>
<tr>
<td>CBR - 2% to 5%</td>
<td>350mm</td>
</tr>
</tbody>
</table>

* Alternative thicknesses of sub grade may be used when CBR 2% to 5% instead of Capping but only when agreed with the Highway Authority.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

All surface course materials must contain granite aggregate only. **Limestone aggregate will not be accepted.**

Alternative designs may be submitted for consideration by the local Highway Authority. However any departures from the guidelines will need to be technically justifiable and be formally agreed by the Service Manager - Highways prior to construction.

5.3 Macadam Footway Construction

Materials are to be supplied and laid in accordance with BS EN 13108.

Table 12 - Macadam Footway Specification

<table>
<thead>
<tr>
<th>Laying Course</th>
<th>Residential Footway</th>
<th>Residential Footway Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphaltic Concrete (Dense Bitumen Macadam)</td>
<td>20mm 6mm nominal size</td>
<td>20mm 6mm nominal size</td>
</tr>
<tr>
<td>Binder course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphaltic Concrete (Dense Bitumen Macadam)</td>
<td>50mm 20mm nominal size</td>
<td>100mm 20mm nominal size</td>
</tr>
<tr>
<td>Sub Base</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type 1 Stone</td>
<td>150mm</td>
<td>150mm</td>
</tr>
<tr>
<td>Type 1 Stone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(MCHW clause 8)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Includes footways near shops or commercial premises at which vehicles may travel or park for maintenance or servicing purposes.

All surface course materials must contain granite aggregate only. **Limestone aggregate will not be accepted.**

Alternative designs may be submitted for consideration by the local Highways Authority. However any departures from the guidelines will need to be technically justifiable and be formally agreed by the Service Manager - Highways.
5.4 Block Paved Carriageway Construction

Block paved carriageways proposed in Sandwell will be none permeable and require a dense course macadam layer beneath the laying course. Although a run-off value of around 95-98% can be expected from a well constructed block pavement, there will be some ingress of surface water over time, which can lead to saturation of the bedding layer.

Therefore any proposed block paved carriageway must include Base Course coring to allow water run-off into the sub base layer for natural dispersion.

Generally cores need to be 75mm diameter at 2m centre grid pattern, filled with clean pea gravel, separated from the sand layer above with a Terram layer (or similar) to avoid the sand layer washing out. Closer spacing of cores may be required depending on site conditions and constraints, at the discretion of the from the Highway Authority.

All areas to be block paved should be treated with weed killer prior to any laying of the sand bedding course.

Diagram 10 - Block Paved Carriageway Detail

Table 13 - Block Paved Carriageway Specification

<table>
<thead>
<tr>
<th>Laying Course</th>
<th>Residential Streets &amp; Home Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Paved Surface Course</td>
<td>80mm</td>
</tr>
<tr>
<td>Bedding Course - Sand</td>
<td>30mm *</td>
</tr>
<tr>
<td><strong>Compacted thickness</strong></td>
<td></td>
</tr>
<tr>
<td>Base Course - Ashpaltic Concrete (Dense Bitumen Macadam)</td>
<td>100mm</td>
</tr>
<tr>
<td></td>
<td>32mm nominal size</td>
</tr>
<tr>
<td>Sub Base Type 1 Stone (MCHW clause 8)</td>
<td>225mm*</td>
</tr>
<tr>
<td>Capping Layer</td>
<td></td>
</tr>
<tr>
<td>CBR &lt; 2%</td>
<td>600mm</td>
</tr>
<tr>
<td>CBR - 2% to 5%</td>
<td>350mm</td>
</tr>
</tbody>
</table>

*Alternative thicknesses of sub grade may be used when CBR 2% to 5% instead of Capping but only when agreed with the Highway Authority.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Depending on the circumstances, alternative designs may be submitted for consideration by the local Highway Authority. However any departures from the guidelines will need to be technically justifiable and be formally agreed by the Service Manager - Highways.

Any alternative modular paving designs should be developed in accordance with BS EN 1338 to 1344 and BS 7533.

5.5 Block Paved Footway Construction

Table 14 - Block Paved Footway Specification

<table>
<thead>
<tr>
<th>Laying Course</th>
<th>Residential Footway</th>
<th>Residential Footway Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single Property</td>
<td>Drives Serving up to 5 Properties &amp; Parking Courts</td>
</tr>
<tr>
<td>Block Paved Surface Course</td>
<td>60mm</td>
<td>80mm</td>
</tr>
<tr>
<td>Bedding Course Sand</td>
<td>30mm Compact thickness</td>
<td>30mm Compact thickness</td>
</tr>
<tr>
<td>Base Course Asphaltic Concrete (Dense Bitumen Macadam)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sub Base Type 1 Stone (MCHW clause 8)</td>
<td>150mm</td>
<td>225mm</td>
</tr>
</tbody>
</table>

* Includes footways near shops or commercial premises at which vehicles may travel or park for maintenance or servicing purposes.

For all block paved areas a suitable means of edge restraint must be provided. Any kerb foundations and haunches must be cured before vibration of the bedding course. It should also present a vertical face on the paved side down to the level of the underside of any bedding course.

Paviours should preferably be cut using a stand-mounted wet saw fitted with a diamond blade. However certain purpose designed hydraulic guillotines may be used where use is agreed with the Highway Authority. All areas to be block paved should be treated with weed killer prior to any laying of the sand bedding course.

Depending on the circumstances alternative designs may be submitted for consideration. However any departures from the guidelines will need to be technically justifiable and be formally agreed by the Service Manager - Highways. Any alternative modular paving designs should be developed in accordance with BS EN 1338 to 1344 and BS 7533.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

6. Drainage

6.1 Introduction

The use of sustainable drainage systems (SuDS) must be considered on all new developments and is actively promoted by Sandwell MBC and Severn Trent Water.

In accordance with the Flood Water and Management Act 2010, the plans for all SuDS proposals, whether they be for permitted developments or those requiring planning permission, must be approved by the SuDS Approving Body (SAB) prior to the start of any construction. The Environment Agency may also require consultation in certain instances.

It is essential that developers liaise with the Local Authority and the Water Authority at the earliest opportunity in the design process to avoid duplication and abortive works.

The Authority requires surface water to be managed on site to the maximum extent feasible before it is discharged to any piped system or watercourse. Surface water discharge from the site should not exceed the equivalent green field rate.

For the key consideration and approaches to be taken for the use of SuDS, the Developer should refer to National Planning Policy Framework (especially paragraphs 100-104), CIRIA C624 : Development and Flood Risk Guidance, and the Authority’s SuDS Development Guide, (currently under development)

Potential components of acceptable SuDS systems can be found in ‘CIRIA C697: The SUDS Manual’.

Any new developments must have separate highway and domestic on-site drainage systems. No private areas will be allowed to discharge into the highway drainage. No private areas will be allowed to drain over proposed or existing highway maintainable at the public expense.

Where it is proposed to connect to an existing or proposed public sewer, the prior consent of the relevant Water Authority will be required. Whenever possible only a single surface water pipe, vested by the Water Authority under Section 104 of the Water Industry Act 1991, shall be laid in the public highway to take discharge from properties and the highway.

6.2 Design of SuDS

Because of the range, diversity and flexibility of sustainable drainage systems it is impractical to provide a comprehensive guide to the design of SuDS within this document.

Developers should refer to CIRIC C624 and C697 and the Local Authority’s
SuDS Development Guide (currently under development) for all aspects of good quality SuDS design.

For components such as green roofs, rainwater harvesting and permeable surfaces, guidance is best sought from providers of these systems and independent organisations specialising in these areas.

The Lead Local Flood Authority or Environment Agency must be consulted when proposing to discharge into controlled waters and a ‘Consent to Discharge’ be obtained. The LLFA or EA should be contacted at the earliest opportunity to determine if any licences are required.

**6.3 Maintenance and Adoption of SuDS**

Subject to Agreement, the lead Local Flood Authority, SuDS Approving Body, Highway Authority or Water Authority may consider the adoption of filter drains, pipework, swales, retention or balancing basins, ponds and wetlands, infiltration basins, trenches and soakaways and bioretention areas.

The use of permeable surfaces, attenuation tanks or other infiltration and storage systems will not normally be accepted as acceptable means of draining adoptable highways. However, innovative design solutions may be considered under the discretion of the Highway Authority.

The developer must provide the adopting authority with an Owner’s Manual which includes an effective maintenance plan that will properly address both the initial and ongoing maintenance of the SuDS system. The Manual should cover the following stages;

- Initial construction and planting
- Intensive management to allow establishment
- First de-silting (particularly important on new developments during the construction phase)
- Ongoing maintenance (routine annual and planned longer term major maintenance)
- Rehabilitation

The SuDS design should ensure that safe and convenient access is possible for personnel and construction equipment when maintenance is required. The Owner’s Manual must include a plan showing the incoming and outgoing drainage systems as well as all areas of responsibility and land ownership details.

**6.4 Highway Drainage Design**

The design of the highway drainage system should comply with the latest edition of *'Sewers for Adoption - (currently 7th edition)'* and should be constructed to the same standards as if it were to be vested by the local Water Authority.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Where surface water drainage, gullies and connections are laid to drain the highway only, these will become highway drains and be adopted as part of the public highway, under the responsibility of the Highway Authority.

Consequently all highway drainage including gullies and their connections will form part of the Section 38 Agreement and will require Technical Approval by the Highway Authority prior to construction.

Prior to adoption, any Highway Drainage System must be visually tested by remote camera and air tested to ensure the construction is to an acceptable and adoptable standard.

Easements

Easements shall be required for all highway drainage that lies outside any proposed or existing highway maintainable at public expense. This shall normally extend to 3 metres either side of the centreline of the pipe. The ‘Deed Of Grant Of Easement’ will be in the Council’s standard form and must be executed at the same time as the Section 38 Agreement.

Road Gullies

All proposed new road gullies must incorporate captivated hinged covers as standard, to the satisfaction of the Highway Authority.

The maximum length of any gully connection should not exceed 17.5m and gullies should be sited to prevent water flowing across junctions or pedestrian crossings.

Gullies must not be sited directly within pedestrian crossing points and if possible be sited away from driveways and access points where practical.

Where any new access road into a development results in an existing gully positioned in the bell-mouth, provision must be made to relocate the existing gully at the expense of the developer.

6.5 Watercourses

The culverting of watercourses will not normally be acceptable as it is preferable to retain open watercourse channels wherever possible. In addition Developers will be encouraged to open up any existing culverted water courses on site as part of the SuDS regime.

6.6 Soakaways

The use of soakaways will not be permitted under carriageways and footways. The use of soakaways for highway drainage purposes must be avoided where possible and should only be considered with the prior approval of the Highway Authority.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Where approved for use, soakaways shall be designed and installed in accordance with BRE Digest 365 ‘Soakaway Design’, except any design must include for a 30 year event. Percolation tests are required in the presence of the Authority prior to the approval of a soakaway design solution at planning application stage.

Highway soakaways shall be positioned the following minimum distances from dwellings;

- 5 metres for conventional perforated soakaways.
- 10 metres for deep soakaways.
- Adjacent soakaways should be spaced a minimum 10 metres apart.

Perforated manholes with either stone surround or geocellular systems must be used when installing soakaways to facilitate storage of water volume. Voids filled with stones or hardcore will not be deemed an acceptable solution.

6.7 Outfalls and Headwalls

Typical outfall and headwall details can be found in 'Sewers for Adoption - (currently 7th edition)'

The Lead Local Flood Authority or Environment Agency must be consulted when proposing to discharge into controlled waters. The LLFA for local watercourses or EA for main rivers, should be contacted at the earliest opportunity to determine if any licences are required.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

7. Adoption Of Highways

7.1 General Information

Sandwell MBC will consider and undertake the adoption of new highway works associated with residential developments having more than 5 residential dwellings and multi-occupancy commercial and industrial developments.

Roads and footways that serve up to 5 residential dwellings will be regarded as private drives and will not be considered acceptable to become highway maintainable at the public expense.

Sandwell MBC require all new highway works to be designed to the most current standards and specifications of the Authority. This will ensure construction is to a satisfactory adoptable standard and therefore acceptable to become maintainable at the public expense.

The standard procedure for the adoption of highways within Sandwell is through a Section 38 Agreement (Highways Act 1980) and are applied to new highway works within the confines of development sites.

Developers should contact the Highway Authority at the earliest possibility to discuss and progress the adoption process for new highway works. Sandwell require that the Section 38 Agreement be engrossed, signed and sealed, prior to the commencement of site supervision.

Good communication is essential and the Developer, or their agent, must give the Highway Authority adequate notice to inspect any works being offered for adoption, prior to that work being covered up by subsequent construction layers.

Development led works on the existing public highway will require the Developer to enter into a Section 278 Agreement (Highways Act 1980), prior to commencement of the work, to ensure all the risks to all parties are reduced and the Developer has the legal right to enter the highway. No Developer will be allowed to work on the existing public highway until the Section 278 Agreement has been engrossed, signed and sealed.

7.2 Advanced Payments Code (APC)

In order to protect the interests of house purchasers, the Advance Payments Code pursuant to Sections 219-225 of the Highways Act 1980, will apply throughout Sandwell. This will ensure that new roads can be completed should a developer default in any way and fail to fulfil their responsibility.

Unless a development is exempted under Section 219 of the Highways Act 1980, within six weeks of a building regulation approval or on receipt of an Initial Notice (issued by the NHBC), the Highway Authority shall serve notice under Section 220 of the Highways Act 1980. This will specify the cost of whole of the streetworks, (determined by the Highway Authority) serving all the dwellings within the development.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

In lieu of a cash or cheque deposit, APC costs may be covered by a suitable Bond, secured by a United Kingdom Bank or insurance company. All transactions made under the APC are registered as a local land charge with Sandwell Council.

An exemption notice will be served and APC payments or sureties refunded (with any accrued interest) under the following conditions.

- At the point where a Developer enters into a Section 38 Agreement with the Highway Authority and the Agreement is signed and sealed.
- If the Developer agrees a construction specification with the Highway Authority for the development to remain as a Private Road, the highway work is inspected during construction and the Developer provides sufficient evidence that future highway maintenance costs will be borne by the residents or third party through an estate ‘rent charge’ or maintenance agreement.

7.3 Section 38 - Pre Agreement Stage

Pre Section 38 Agreement requirements include;

- Full Planning Permission
- Plan showing areas offered for adoption
- Evidence of Land Title
- Drainage Approvals
- Highway Technical Approval
- Street Lighting
- Surety
- Commuted Sums

Full Planning Permission

Section 38 submissions will only be considered following full planning permission from the planning authority. Full planning approval does not imply that the works are technically approved by the Highway Authority.

Areas Offered For Adoption

In order to enter into a Section 38 Agreement the Developer must make a formal written application to the Service Manager - Highways. This should be accompanied by the proposed layout at 1:500 showing the areas offered for adoption, coloured as follows:

- Carriageways: Grey
- Footways/footpaths: Yellow
- Soft verges/landscaping: Green
- Hard landscaping: Orange
- Highway drainage: Blue
- Highway structures: Red
- Site boundary: Edged Red
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Phasing of developments will be considered. However, no works will be adopted until those works connecting them to the existing public highway have been adopted. Any works subject to a Section 38 Agreement must abut the existing highway maintainable at public expense or to works subject to another Section 38 Agreement.

As part of the development, if it is necessary to alter or undertake works within the existing public highway these works will be subject to a separate Section 278 Agreement (Highways Act 1980). See Section 7.5.

The Highway Authority will only adopt footways that perform a public highway function. This will normally be limited to those fronting habitable dwellings and those linking proposed or existing adopted footways.

Sandwell will not adopt large areas of landscaping under a Section 38 Agreement if it serves no utility as public highway. Public Open Spaces and landscaped areas with footpaths crossing them may be adopted under separate Agreement.

All enquiries with respect to the adoption of Public Open Space and associated footpaths should be made to the Area Director - Street Scene, Sandwell Council House, Freeth Street, Oldbury, West Midlands. B69 3DE.

Evidence Of Land Title

The Developer must prove title to the land they are developing and supply necessary evidence in the form of Office Copy Entries. The site boundary on the coloured Section 38 submission plan must comply with evidence of the legal title provided.

In order to ensure that all areas not offered for adoption are responsibly maintained, the Developer must submit with his application a plan showing the person or persons responsible for maintaining those areas.

Drainage Approvals

It is the policy of the Council that works subject to the Section 38 Agreement must either drain directly into sewers to be vested in the Water Authority under Section 104 of the Water Industry Act 1991 or an existing highway drain connected directly to an adopted surface water sewer or an approved outfall.

A Section 38 Agreement will not be sealed in advance of written confirmation from the Water Authority to this effect. Similarly highway works will not be adopted until the sewers into which they drain are adopted.

In the case of an approved outfall, arrangements must be made for all appropriate permissions to be obtained and copies provided to the
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

Highway Authority. These permissions should indicate that no further costs shall be required from the Highway Authority, subsequent to any adoption.

Highway Technical Approval

Submission of plans and documentation can be submitted electronically, or by providing 2 hard copies of the following:

- A location plan at 1:1000
- A site layout plan to 1:500 scale showing the roads, footway and sewers, the positions of private drives, car parking areas, retaining walls, visibility splays and private parking areas.
- Road and drainage long section to 1:500 horizontal scale and 1:100 vertical scale.
- A typical carriageway and footway cross-section. This drawing should also show the California Bearing Ratio (CBR) assumed (or measured) for the sub-grade material.
- Construction details.
- Traffic signal layouts and controller specification (TR2500) if applicable.
- Details of proposed structures including plans, calculations and technical approval certificates.
- Details of road markings and traffic signs.
- A ground condition survey that shall be undertaken by a UKAS accredited laboratory.
- Stage 1 and 2 Road Safety Audits (where applicable).
- Specifications for any proposed non-standard materials and specialist construction techniques.

Street Lighting

The street lighting layout, design, specification and specification for any other illuminated street furniture will be provided by the Highways Service Manager after submission of a site layout drawing. The cost of this shall be included within the Section 38 Inspection Fee.

All street lighting details and specification must be subsequently added to the site layout drawing before technical approval will be granted.

Sandwell actively supports the use of low energy, long life alternatives, and developers will be required to utilise this technology.

If a developer proposes to use an independent power network, a service level agreement must be provided by the independent service provider and approved by the Service Manager - Highways prior to installation.

In the period prior to adoption of the highway, the developer will be responsible for the replacement and repair of any damaged or faulty street lighting equipment together with all related energy costs.
Surety

Street works carried out and secured by a Section 38 Agreement must be accompanied by a surety, to enable the highway Authority to compete the highway works, should the Developer default in any way.

This can be either in the form of a cash surety or by a Bond sum equal to 100% of the total cost of the works. The surety amount will be determined by the Highway Authority, using their current Minor Work Framework Contractor rates, for inclusion within the Agreement.

Any proposed Bond must be secured by a United Kingdom Bank or insurance company or the National House Building Council.

The Developer, at his discretion, may alternatively deposit a sum of money with the Council in lieu of a Bond (by cheque or BACS transfer).

Commuted Sums

It is the intention that commuted sums will be requested to cover future maintenance costs of certain areas or items that the Highway Authority deem necessary. Policy in relation to this item is currently being developed.

7.4 Section 38 - Post Agreement (Construction) Stage

Payments to the Highway Authority

A charge (the Inspection Fee) is payable by the Developer to the Highway Authority as soon as the agreement is sealed, to cover the costs involved with design checking, preparation and administration of Agreements, street lighting design and site inspections.

The charge will be the current policy approved percentage rate of the total construction amount. Developers should contact the Highway Authority for the latest fees and charges.

In the event of the development not going ahead, a charge will be made by the Highway Authority to recover abortive costs for any design check or Agreement related works.

Any costs associated with the introduction of Traffic Regulation Orders as a consequence of a development will be additional to the Section 38 Inspection Fee and will be invoiced separately.

Site Inspection

Prior to commencement of any highway works proposed for adoption, a pre-start meeting must be arranged with the Highway Authority.
include those shown in Section 7.3 - Highways Technical Approval plus the addition of:

- A plan (Marked A) showing the site boundary edged red.
- A plan (Marked B) showing the extent of proposed works shaded blue.

As part of any Section 278 Agreement the developer will be required to improve all existing footways (including kerbing) that are fronting and adjacent to any new development where considered necessary.

Two certificates will be issued as part of the Section 278 Agreement during the construction phase of the development.

- **Provisional Certificate** - Full completion of highway works - Bond reduced to 20% value
- **Final Certificate** - Following 12 months maintenance - Bond released

The same Inspection Fees, site inspection regime and technical approval process of the Section 38 procedure will apply.

It must be noted that no Developer will be allowed to work on the existing public highway **until** the Section 278 Agreement has been engrossed, signed and sealed and all inspection fees have been paid.

### 7.6 Landscaped Areas

Landscaping forming a part of the Section 38 Agreement should normally be in the form of setts, block paving or, where appropriate, deterrent paving. Where landscaping forms a part of the proposals for adoption, then the following principles should be observed:

- Landscaped areas shall form an integral part of the proposed highway maintainable at public expense e.g. verges between carriageways and footways, and the central islands of small roundabouts.
- Where soft landscaping is provided it shall normally be in the form of grassed areas only.
- It is not the Council’s policy to adopt visibility splays. However, in any conveyance, covenants should be provided for these areas, clearly stating that no soft landscaping or indeed any structure with a final height of over 900mm should be placed in these areas.
- The maintenance period of twelve months will not commence until the associated landscaping has been completed.
- Trees should not be placed within 4.5 metres of the centre line of the road and a clear height of 5.1 metres must exist between the carriageway surface and the lowest branch.

Where service strips are to be provided to frontages, a clause should be written into plot conveyances indicating that the service strip will form part of the publicly maintained highway.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

The Highway Authority will require to inspect highway works at each key stage of the highway construction. Failure to have works inspected will prejudice adoption of the highway.

Certificates will only be released following completion of works specified by the Agreement and to the full satisfaction of the Highway Authority.

Completion Certificates

Three certificates will be issued as part of the Section 38 Agreement during the construction phase of the development.

- **Part 1** - Partial completion of highway works - Surety reduced to 67%
- **Part 2** - Full completion of highway works - Surety reduced to 20%
- **Final Certificate** - Following 12 months maintenance - Surety released

Final Adoption

Release of the Final Certificate, and the point when the highway becomes maintainable at public expense, shall occur when:

- A minimum 12 month maintenance period has been completed
- All remedial works have been completed
- Any required Traffic Regulation Orders have been introduced
- A fully detailed as built topographical survey has been provided
- Street lighting test certificates have been provided
- Health and Safety file has been provided
- Adoption of drainage by the Water Authority is complete

7.5 Section 278 Agreements

Where a development requires an improvement or realignment of part of an existing highway, the Council may enter into an agreement under Section 278 of the Highways Act 1980, and the Developer must bear the cost of these works.

The Council may allow the Developer to carry out these works. Should this be the case then the Council, in its capacity as Highway Authority, shall appoint the Developer as its agent.

Contractors carrying out Section 278 works shall be on the Council’s approved list. Failing this, the contractor must send to the Highway Authority three references from other local authorities for similar types of work for its consideration.

The process of undertaking a Section 278 Agreement is similar to that for a Section 38 Agreement. Drawings required for Technical Approval
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

8. Network Management

8.1 Works on the Public Highway

Where any work is to be carried out in the adopted public highway the Developer must contact the Council’s Traffic Manager no less than 8 weeks prior to planned commencement, to plan and agree lawful occupation of the highway to:

- Ensure public safety;
- Minimise inconvenience to persons using the street
- Co-ordinate with other planned works, including utility work ordered by the Developer to service the development
- Protect the structure of the street and the apparatus in it.

8.2 Notices

Any works in the highway that are outside the boundary of an agreed Section 278 Agreement must be appropriately licensed under statutory provisions. Such work may include:

- Placing apparatus in the street (sewer connections) (S.50 NRSWA)
- Breaking up the highway (road opening licence) (S.171 Highways Act)
- Scaffold licence
- Hoarding licence
- Skips
- Deposit materials
- Crane
- Suspension of parking bays

Fees and charges are payable for all permits and licences. Developers should contact the Traffic Manager for the latest fees and charges.

No work of any kind in the highway shall be permitted until the appropriate agreement or licence is in place.

A minimum of 8 weeks notice is required to arrange occupation of the highway (temporary traffic regulation orders including road closure, lane closures, footway closures, traffic signal switch offs, and so on).

Notification for any of the above works does not negate the duty to notify the authority on the commencement of any Section 38 or 278 works that effect the public highway.

8.3 Mud on the Highway

Developers are particularly advised that it is an offence under the Highways Act to deposit mud on the highway or allow materials to enter the highway surface water drainage. Sandwell Council will actively seek to prosecute such offences. The Developer must install wheel washing facilities at all exits to sites.
8.4 Health and Safety

All work in the highway shall be adequately dealt with in the Developer’s Health & Safety Plan. Clear responsibilities for work on the highway shall be identified in the Plan, with the Developer, as works promoter, having the ultimate responsibility.

The Plan shall include a safe system of work including appropriate signing, lighting and guarding in accordance with the current edition of the Code of Practice ‘Safety at Street Works and Road Works’ published pursuant to the New Roads & Street Works Act 1991.

Plans showing temporary traffic management arrangements may be required by the Highway Authority as deemed necessary.

8.5 Public Utilities

Public utility apparatus on estate roads should be provided in the most economic manner consistent with consumer convenience, ease of maintenance and good appearance.

Statutory Undertakers will prefer to install their apparatus in areas of adoptable public highway or in land maintained by the local Authority. To minimise installation costs and avoid any future disruption to traffic flows, public utility infrastructure will generally be laid in footways adjacent to carriageways.

Hence the developer should consult with Statutory Undertakers and co-ordinate the location of mains and services at the earliest opportunity, particularly where street trees are proposed.

Developers should consider ‘NJUG Volume 2: Guidelines On The Positioning Of Underground Utilities Apparatus For New Development Sites (Issue 2)’.

The positioning of service covers is important and must be co-ordinated with the Statutory Undertakers. Where possible, surface boxes should be laid parallel to the line of the footway or verges, and recessed covers should be used in high quality paved areas, block paved areas and in tactile paving.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

9. Stopping Up and Extinguishment

9.1 Introduction

Several methods are available to Developer’s wishing to Stop Up and Extinguish highways and Public Rights of Way (PROW) to enable development. These processes are important as they authorise development that otherwise could constitute a criminal offence and a public nuisance.

The onus to bring about Stopping Up Orders lies with Developers. However the Developer’s Legal Representative should contact Sandwell’s Public Rights of Way team or the Highway Closure Officer at the earliest opportunity to gain advice on the most appropriate process for their proposed development.

Highways can have different categories of rights of passage, from lower order simple footpaths to full vehicular rights incorporating footways and pavements.

All new, improved or diverted highways constructed as the result of a Stopping Up Order, must be constructed to an adoptable standard. Developers are required to strictly comply with the terms and conditions of any Stopping Up Order, whose extinguishment provisions will depend upon certain key conditions being met as the development proceeds.

There are essentially two main ways of stopping up and extinguishing highways, through Highway Orders and through the use of the Magistrates Court.

9.2 Development Based Highway Orders

Orders can be made under section 247 and 257 of the Town and Country Planning Act 1990. These require an application to the Department for Transport under Section 247 of the T&CP Act and Section 257 for lower order highways that have no full vehicular rights. This is the most common method of stopping up a highway for development purposes.

Both Section 247 and 257 orders require the existence of a planning permission and justification to permanently alter the highway. Both have a 28 day objection period before they can be confirmed and made. Any opposed orders will be determined by the Government which may result in a Public Inquiry in certain circumstances.

Both orders attract a fee, current levels of which should be obtained from the Department for Transport. Currently no time scales are given to obtain such orders but the developer should ensure the appropriate planning permission does not expire and preclude an order from being implemented.
APPENDIX 3 - GUIDE TO THE DESIGN OF NEW STREETS

The development as a whole should proceed to completion to demonstrate any stopping up is compliant with the planning permission the order was based on. Powers exist to the local planning authority to enforce the completion of a development for which planning permission has been granted.

9.3 Magistrate Based Orders

Section 116 Highways Act 1980 allows Stopping Up and Diversion Orders to be obtained by use of the judiciary, in a way which can avoid some of the constraints of development based orders.

Diversion orders are limited to unobstructed highways and will require any new construction to be to adoptable standards. In certain instances a Stopping up Order can be applied for to the Local Magistrates Court.

All costs and liabilities concerning such orders must be met by the Developers regardless of their success. Diversion Orders involving new developments will be linked to the programme of works. Stopping Up Orders can be secured relatively quickly depending upon the circumstances, although the last minute approach is not recommended due to the complications it can cause.
APPENDIX 4 - CODES OF GOOD PRACTICE FOR TREE PLANTING
APPENDIX 4
CODES OF GOOD PRACTICE FOR TREE PLANTING

Safe Distance (m)
Tree Species (normal mature height m)

Safe planting distances for specific trees
Cover pictures:
Lyng and Eastern Gateway, West Bromwich