## Form

the detailed aspects that make up the threedimensional configuration of the built environment.

- 4.1. The Form of development proposals must provide a strong contextual response to each site, and create distinctive identity.
- 4.2. In line with Policy DE1, the form of development proposals will be assessed in terms of: siting, orientation, scale, massing, materials and detailing, and these must be addressed within all new development proposals [Para 4.15, SBLP 2026]
- 4.3. This section provides considerations, guidance and expectations for each of these elements of the policy.
- 4.4. Each plot consists of a set of different elements that should come together to form a built response to the context. Combined with the street, these are the kit of parts that make up the form of the development. This is explored further throughout this section to help articulate the expectations of Policy DE1, and in more detail in Chapter 8 of this document.

design policies should avoid unnecessary prescription or detail and should concentrate on guiding the overall scale, density, massing, height, landscape, layout, materials and access of new development NPPF 59

- Siting
- Orientation

- Scale
- Massing
- Materials
- Detailing

## Siting

31

the configuration and relationship of a building's footprint to the existing context, character and the vision for the development.

4.5. The siting of a building should address and respond to the **local distinctiveness** by considering character, context, routes, trees, buildings, landscape, topography, street patterns and neighbouring buildings (also discussed in Section 1). Proposals will be assessed in this regard. **NPPF 60** 





- 4.6. Development along a slope should not include rising plinths visible within the public realm. Rising plinths are physical build-ups to increase the slab level up to or above the ground level. Large plinths resulting in a high bland build-up can have a detrimental impact on a streetscene particularly where they create an inactive frontage, regardless of the elevational design proposed above. In a streetscene of buildings on a slope, it is usually better to create a level-change at the party wall between dwellings (Fig 49), and not within the area of the dwelling itself. This helps to avoid split-level roofs and split ground floor levels within each property. This approach however may not always be appropriate for pairs of semi-detached dwellings.
- 4.7. Poorly considered development on sloping sites results in the over-use of retaining walls which cause amenity and maintenance issues and are generally unacceptable.
- 4.8. Access to properties on sloping sites can result in awkward relationships between private amenity and public realm if not designed well. It is important to consider the siting of buildings within their context to ensure ramps and retaining structures do not detract from local identity and the design of the street. In all circumstances, a 3-dimensional understanding and articulation of proposals is required to ensure private gardens, elevations and public realm are not compromised.







- 4.9. Key buildings / landmark buildings should be orientated and sited to give maximum prominence and to ensure the scheme benefits from views of the building from the public realm (Fig 51). Wherever possible these buildings should align with the central axis of the street in order to give them prominence and meaning within their local setting.
- 4.10. Layouts that include buildings that are off alignment, or where a vista ends in a parking space or garage have lost the opportunity to create positive identity and meaning. In such cases changes to a layout will be expected to address this.



Key building sited to achieve prominence. Fig 51

- 4.11. Building lines proposals must ensure that established building lines that form part of an area's identity and character are maintained through the siting of new development. NPPF 58
- 4.12. The consistency of building lines is a common aspect of many successful streets in urban environments (Fig 52). Avenues, Boulevards, Mews, urban streetscenes and edges to green space are strong character cues. Development within these structured urban forms, must adhere and reinforce that characteristic. In some cases a strong consistent building line will be necessary to reflect the existing built form or intended character of the street (Fig 53). Other contexts such as rural areas or fringes of development a more fragmented or loose arrangement may be appropriate.



Strong consistent building line, consistent form. Fig 52

#### Siting Checklist

The siting of new developments must respect established building lines and reinforce existing street character.

Site level differences should be addressed by cut and fill to avoid rising plinths, large raised platforms and retaining structures

Changes in levels along a terraced streetscene should be accommodated at the party wall, and not within the ridgeline.

Built form must wherever possible align with and frame views and vistas. Buildings that are off alignment or that negatively impact on a view will not be acceptable.



## Orientation

the direction in which the proposed building faces.

- 4.13. Buildings should be oriented so that their public frontage faces the dominant street. Buildings that turn corners or form several frontages should positively address both streets and two public facades may be necessary (Figs 55 & 56).
- 4.14. Buildings that **terminate vistas** should be aligned carefully to take advantage of framed views of the building's frontage and to maximise passive surveillance of the adjacent public realm (Fig 54).



Building orientated to close the vista. Fig 54

- 4.15. The direction a building faces should ensure **corners and vista terminations** are addressed, the public realm is overlooked and solar gain is NPPF 96 maximised.
- 4.16. Where side elevations of a corner building also face the public realm, they should be punctuated by carefully articulated window openings and designed as attractive elevations which relate positively to the public realm.



#### **Orientation Checklist**

Buildings should be orientated to ensure their public frontage faces the dominant street.

- Side elevations onto the public realm should be designed to be attractive and provide positive surveillance over the public realm.
- Buildings that are framed within a view of a terminating vista should face this terminating view.
- Buildings should be arranged to avoid unusable, leftover space.



Building orientated to address both corners. Fig 56

## Scale

the size of built form as a relative concept; in proportion to context, character, public realm and human scale. NPPF 59

4.17. Developments generally must be in scale with their surroundings and with the public realm that serves them (Fig 57). NPPF 60 Proposals that are out of scale in relation to their context may be referred to as *incongruent*, *inharmonious*, or *over* dominant and as such will be resisted. Where existing or proposed buildings have been identified as 'key' buildings, such as at a 'gateway' or at the termination of an important line of site, then they may be more prominent in terms of scale. In all instances the scale of buildings needs to be very carefully considered in terms of amenity of neighbours and overall context.



Public realm in scale with built form. Fig 57

- 4.18. Tall buildings (defined as considerably higher than the existing built environment<sup>5</sup>) need to satisfy the above principle of scale in relation to the impact on the existing or proposed context (Fig 58). Tall buildings especially those above 5-storeys have a marked effect on the skyline and such proposals will be expected to undergo the design review process in order to agree a high quality architectural design. Generally buildings over 5-storeys should be reserved for the town centre see Policy CAAP1 of the adopted Swindon Central Area Action Plan.
- 4.19. The scale of individual parts of a development should also be in proportion. Houses along a street should relate in scale to each other; new street trees planted to make up an avenue should be of sufficient initial and potential size to create impact; and large key buildings should have complimentary architectural articulation and frontage space.
- 4.20. In existing and established areas where new development is proposed, particularly brownfield, backland or infill sites, scale is often a deciding factor in the success or failure of a scheme and the impact on character and amenity will be carefully assessed.

#### Scale Checklist

- Development must be in scale with its context, character, public realm and use (human or civic scale)
- The use of "tall", dominant or iconic buildings must be fully justified by high quality design
- Elements of a development must be complimentary to the dwelling and street character
- The scale of development, individual buildings or their components must not compromise amenity



## Massing

the 3 dimensional development envelope and the rhythms and patterns of it.

4.21. Massing may be considered at two scales:

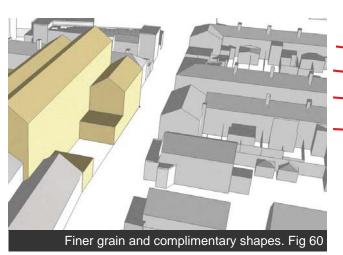
- + the urban grain
- + the detailed composition
- 4.22. The first scale of massing involves the **shape, height** and **bulk** of the built form together and comprises the whole building or group of buildings. The detailed composition however is concerned with how elements of each building are organised in terms of **proportion** and **rhythm.**
- 4.23. The massing of development must compliment and reinforce the existing urban grain, the character and the street hierarchy. It should help to shape and enclose public spaces and contribute to a coherent and harmonious townscape.

4.24. This may be at a building scale in terms of the overall shape or silhouette of the building form(s) or conveyed in more detailed ways such as patterns of openings, porches, projecting bays, chimneys, boundary treatments and other rhythmic features.

#### **Urban Grain**

- 4.25. In the first example (Fig 59) the massing of the proposed building fails to respond to the fine grain of the surrounding built form. The roof shape clashes with the inherent character and the bulk dominates the townscape and overwhelms the traditional surroundings. This scheme fails at a urban grain level (shape and bulk) - no elevational treatment can satisfactorily address the massing issue.
- 4.26. The second example (Fig 60) uses the same quantum of built form, but is moulded to a more sensitive, less dominant massing comprising a collection of smaller built forms responsive to the surrounding context. A traditional roof form compliments the existing character and shapes. The finer grain of the design adds to the complexity and richness of the proposal within the wider townscape.
- 4.27. The insertion of a wide, horizontally emphasised building adjoining traditional vertically dominant frontages (Fig 61) results in conflict within the street. The floor levels for each storey fail to correspond and the elevational compositions are polarised.







#### **Detailed composition**

- 4.28. The perceived mass of buildings can be strongly influenced by the architectural features and built elements of the façade such as chimneys, fenestration, balconies and porches.
- 4.29. Where there is a clear massing characteristic or feature, new development should compliment, harmonise and reflect it. Examples of this include strong vertical (Fig 64) or horizontal emphasis (Fig 63), dominant roof forms, patterns of openings, or classical proportions.
- 4.30. Buildings that appear as 'monolithic', 'mundane', bland or even blank in expression usually result from badly proportioned window openings or poorly arranged facades with conflicting horizontal and vertical emphasis in their composition (Fig 62).

- 4.31. Inactive ground floors that do not contribute to the street should also be avoided.
- 4.32. Proportion is an inherent part of massing and the relationship between the parts of a building should come together to support the overall emphasis. Proportion also plays a strong role in the character of an area and this can be seen in the wider frontages and curved bays of the 1930s semi-detached developments (Fig 63) contrasted with the vertical emphasis of the Victorian and Edwardian terraces.
- 4.33. Therefore within massing the more detailed elements should also be considered such as the form of the elevation and the shape of openings but these alone cannot compensate for a poor overall build massing as in Fig 59.

#### Massing Checklist

- Development massing (height, width, shape) must positively contribute to surrounding streets, public realm and townscape
- Over-dominant buildings or elements out of proportion with the host dwelling, neighbouring buildings, the street or their setting will not be acceptable
- New development should respect established rhythms and proportional emphasis or reflect the intended character of the vision on larger sites
- Clashing emphasis (vertical vs horizontal) is rarely considered acceptable





Strong horizontal massing and elements. Fig 63



Strong vertical emphasis and patterns. Fig 64

36

### **Materials**

The outer skin of the development.

4.34. Materials are often the part of a development most noticed and experienced by people as they are visual, tactile and dynamic. Good quality materials pay dividends in terms of uplift value, resilience, and can support many of the design principles of Policy DE1 such as legibility and character. A high quality complimentary palette of materials is expected for all development proposals.

NPPF 59

- 4.35. Materials should be chosen to reflect the local identity and the intended approach to each character area on large NPPF 58 development proposals. Different material finishes may also be appropriate to define key buildings, spaces, streets or pathways through the development as well as ownership and transitions.
- 4.36. The quality of materials is a design consideration and the colour, texture and scale of materials should respond to the context and character of the setting. The durability, weathering impact and other material attributes are all legitimate considerations. In some cases sourcing local or natural materials will be necessary to secure or maintain local distinctiveness, historic integrity and overall quality.
- 4.37. Materials extend beyond the buildings themselves and the public realm must be treated with durable high quality materials. This extends to the interfaces with private land and the means of enclosure. The use of timber panel fencing will not be acceptable along boundaries with the public realm instead these should generally be formed from brick or stone walling to compliment the adjacent buildings. Generally railings should be mounted on low walls or plinths to avoid plant and soil overspill into the public realm. Similarly, the use of loose surface treatments (such as gravel or chippings) should be avoided on public frontages to minimise overspill particularly immediately adjacent to the public highway.
- 4.38. The treatment of individual buildings and their associated enclosures, surfaces, roofs and component parts, must be coordinated to reflect the wider street and site character. As touched upon in the previous sections on Scale and Massing, the use of oversized elements such as full size roof tiles on porches or heavy fascia boards as well as undersized elements such as weak entrance treatments, will not be acceptable.

- 4.39. The cost of quality materials especially in the public realm, should be measured in terms of the overall benefits value uplift, lower maintenance costs, longer life-span and not considered solely in terms of the initial outlay. Cheap, poor quality materials can reduce a schemes appeal, value, lifespan, and local identity. NPPF 17
- 4.40. Creating a simple palette and NPPF 56 reflecting the colours on-site is the best way to address the appropriateness of both the materials and their colours. The LPA may require a sample palette of materials to be erected on site for assessment in the local context.





- 4.41. Colour plays an important part in the choice of materials. Swindon's local brick is a red/orange stock and in Old Town and within the railway housing, this can be seen combined with the local grey Portland Limestone. Across the rural areas of the Borough and within the smaller settlements, different characters prevail (Fig 65). Proposals there will be expected to reflect the naturally occurring materials and the general colour palette found within those more rural and natural landscape contexts.
- 4.42. The use of complementary colours and the textures of proposed materials is important in order to establish a sense of unity and identity across the development, and so too is the use of contrasting colours to highlight key features, architectural elements or on key/landmark buildings. A colour wheel is a very helpful technical tool in establishing a complementary and contrasting colour palette.

#### Materials Checklist

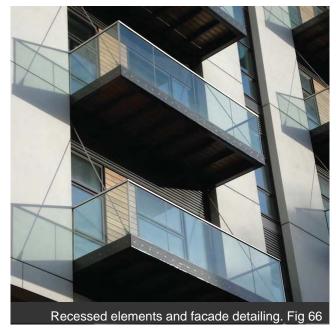
- Materials must be of good quality in terms of aesthetic value and longterm durability and maintenance
- Proposals should reflect local character and setting through the choice of materials, colour, texture and scale
- Timber panel fencing is not acceptable adjacent to the public realm and generally railings should be mounted
- Loose surface treatments that are not adequately contained will not generally be acceptable



## Detailing

the detailed elements of both buildings and the public realm and the interface between these two.

- 4.43. Carefully thought out detailing should ensure the various elements of a building relate well to the composition of a facade, the choice of boundary treatment and interface between public/private space. These can make or break the success of a place its identity and response to the existing character.
- 4.44. Successful developments comprise architecture with harmonising scale, proportion and rhythm carried through to components, such as openings, bays, projections, roof forms, chimneys, etc.
- 4.45. By taking cues from existing buildings and features in the area it is possible to create an addition to the built environment that complements without slavishly copying the existing (Fig 67). Respecting cues like scale and massing but using an innovative approach to materials and detailing makes it possible to reinforce the identity of an area and contribute to its special character in a creative manner. There is no reason why character and innovation should not go together. New and old buildings can coexist happily without disguising one as the other, if well designed.
- 4.46. Doors and windows the composition of doors and window openings in elevations should be designed to create harmony through the careful articulation of aspects such as scale, proportion and rhythm (Fig 66). It is generally not appropriate to mix horizontal with vertical emphasis.
- 4.47. Doors and windows should in most cases be recessed into the outer wall of the building (Fig 68) to provide sufficient relief/ shadow within the elevation. Window and door frames flush with the outer skin will only be acceptable where this is justified in terms of a high quality contemporary architectural expression.





The Old & the New in harmony and proportion. Fig 67



Good door / window / balcony composition. Fig 68

4.48. Entrance features - porches, canopies, porticoes and door surrounds, should all be designed as robust, architectural elements inherently-related to the host dwelling (Fig 69), and not as ill-conceived add-ons.

#### 4.49. Rainwater goods must be

sympathetically accommodated on facades of buildings and duplicate runs of down pipes avoided by grouping collections (Fig 68). On terraced buildings single down pipes should be located at the boundary line.

- 4.50. Chimneys chimneys have been a distinctive architectural feature for most 19th and 20th century housing. They add interest to a roof line and introduce a simple but effective rhythm along the street (Fig 70).
- 4.51. Where chimneys are proposed, they should be used as integral parts of a building, they can be used as heat-stack ventilation (a very effective way of extracting stale air out of a building and allowing fresh air in), or as an active flue.
- 4.52. Chimneys should not generally be located in line with or above doors or windows.

**NPPF 60** 



Strong entrance features - no visible services. Fig 69



Distinctive rhythmical chimneys. Fig 70

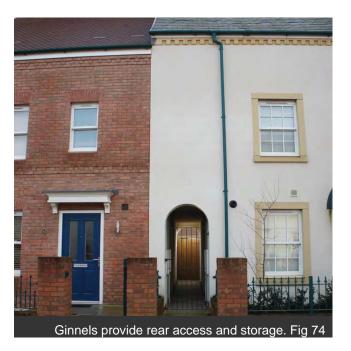
4.53. Trees can contribute significantly to the distinctiveness and attractiveness of an area and the use of different species can aid legibility and character. Trees provided within hard landscaped areas such as courtyards or the public highway should usually be protected by grilles and guards (Fig 71) unless they are sighted in grass verges or planting. In many cases heavy standard tree species will be expected to provide impact in the street and create an established landscape setting and avoid the need for further protection measures. Details of maintenance and watering regimes will also be required to ensure long term survival and growth.



- 4.54. **Balconies & balustrades** (either inset or add-on) can add great emphasis to a building and assist in the composition of an elevation. They can improve the perceived massing of a building, enliven its frontage (Fig 72) and provide amenity space.
- 4.55. Inset balconies integral to the structure of the building, (Fig 68) or projecting balconies (Fig 66) need to be designed to be functional and not just decorative, in order to be used and appreciated by their occupiers. Under-sized and therefore unusable balconies are rarely appropriate and will be resisted in most cases.
- 4.56. Care must be taken to ensure that balconies are designed to correspond with the scale, rhythm and proportion of the facade of the building. In addition consideration should be paid to how balustrades are fixed into the structure of a building. Poorly positioned balustrades fixed so that they straddle over two different materials, or over window lintels or other features of the facade are not acceptable Fig 73).
- 4.57. **Ginnels** -punctuated between terraced properties these provide good accessibility with a short run between rear gardens and the public highway (Fig 74). This also avoids the need for long and often protracted rear access paths that are mostly unsafe (Page 25), inefficient and that tend to become cluttered or underused by residents. Where wheelie bins and recycling boxes are left in these pathways they become unattractive and their use further declines.

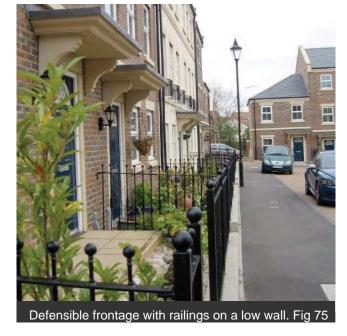






SWINDON RESIDENTIAL DESIGN GUIDE SPD 2016

- 4.58. Boundary treatments are important to form a clear definition between the public and private realm. They have an important role to play in establishing character for a house and a street, for providing a sense of defensible space at the front, and a secure enclosure at the rear of a property.
- 4.59. Where railings are proposed, they should generally be positioned onto a low wall (Fig 75) to avoid overspilling of ground cover (Fig 78). Enclosures adjoining the public realm should not be formed by close boarded fencing or include loose paving materials such as gravel without low wall structures to contain them.
- 4.60. Boundary walls should be formed from materials that match or correspond with the development. Where bricks are used a header row, or row lock course or coping stones should top the wall ideally with a lower tile crease (Fig 76)
- 4.61. Eaves details poorly considered eaves detailing resulting from the need to accommodate sufficient levels of insulation within certain roof types can result in oversized eaves with very large soffit boards and box gutters. These architectural details should be designed to achieve guality and elegance in their construction without dominating owing to their scale.
- 4.62. Levels site levels across a proposed development are key to understanding how roads, buildings and the public realm will work. Assessment is needed of the public realm quality throughout the development; how level thresholds are achievable for each house: the functionality of the elements of a sustainable drainage scheme, of play areas and private garden space, etc.
- 4.63. Detailed existing and proposed site and slab levels must be provided to the LPA early in the design stage for all major development proposals to avoid problems such as those below (Fig 77).





Tile-crease & header course on boundary wall. Fig 76



Lack of consideration of levels and poor access. Fig 77 SWINDON RESIDENTIAL DESIGN GUIDE SPD 2016 42

#### **Details Checklist**

- **Components** of a building and its facade should all be complimentary and in scale with the building
- **Doors and windows** should generally be of the same vertical or horizontal emphasis and recessed into the outer wall of the building
- Rainwater goods should be located to compliment the facade and in terraced properties grouped at the boundary line

#### Details Checklist

- Chimneys should be designed to accord with the facade of a building and not located above entrances
- Balconies should provide usable external amenity space. Their siting must consider other features on the facade. Undersized, unusable and poorly sited balconies will be resisted

#### **Details Checklist**

- **Boundaries** with the public realm should not be formed by fencing and railings should be mounted on plinths or walls
- **Ginnels** should be considered to provide a solution for rear access and storage for terraced properties to avoid rear alleyways and poorly surveyed paths





## Function

the utility or need required to satisfy the intended uses generated by each development proposal over the longer-term;

- 5.1. Function is a key aspect determining the quality of an overall design. Poorly designed development that fails to take the opportunities available for improving the way an area functions should be refused. It is essential that a place functions effectively to ensure its use is optimised and its character can fully emerge. Predicting the function of a scheme requires an understanding of how the parts of a neighbourhood, a street and an individual plot should come together to form a complete composition visually and operationally.
- 5.2. In this section the topics of sustainable drainage systems;
   parking arrangements; refuse & recycling provision and utilities are each discussed in turn.

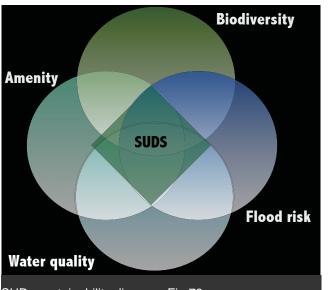


- Sustainable Drainage
- Parking
- Refuse and Recycling
- Utilities

## Sustainable Drainage

When determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere NPPF para 103

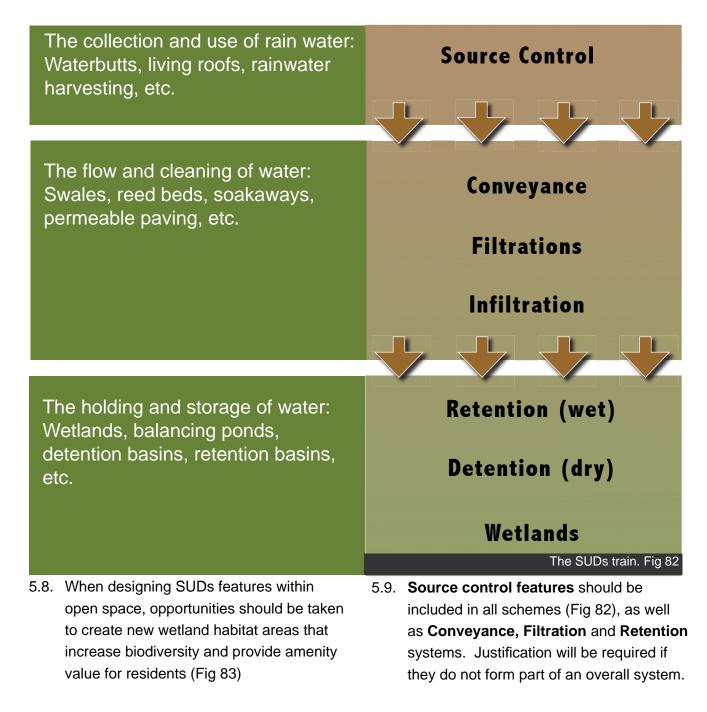
- 5.3. Sustainable urban drainage systems (SUDs) are designed to reduce the impact of developments with respect to NPPF 17 surface water discharges to reduce the risk of flooding. There are many merits of SUDs: Reduced flood risk, Biodiversity gains, Water quality, and NPPF 99 Amenity (Fig 79).
- 5.4. No one component should distort or imbalance another and schemes must demonstrate how each benefit is to be achieved and incorporated in each planning proposal (SBLP policy EN6).
- 5.5. SUDs should compliment and support the overall character and placemaking vision, contributing to the quality and functioning aspects of the public realm. As such SUDs must provide a good level of multifunctionality. Stand-alone balancing ponds at the end of underground piped-systems do not constitute an acceptable sustainable drainage solution. Poorly designed drainage ponds are an eyesore, usually a maintenance liability, add little biodiversity value and provide no real amenity to residents (Fig 80).
- 5.6. SUDs need to be considered early in the design process. The integrated design of SUDs within streets and open spaces is crucial to reinforce the placemaking and secure high quality design DE1 (Fig 81). As pieces of essential infrastructure, SUDs need to be considered as 'entire management trains' so that all stages of the process can positively integrate into site layout design considerations.
- 5.7. Drainage feature **gradients** are critical to assess the usability of the space. SUDs that do not demonstrate real public use and/or have steep gradients will not be counted towards usable public open space unless significant amenity value can be demonstrated and secured.



SUDs sustainability diagram. Fig 79

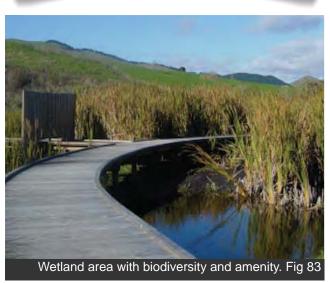






#### SUDs Checklist

- All four components of SUDs must be addressed and in balance
- Tanked and piped solutions should only be used if it is demonstrated all SUDs methods are not possible
- SUDs should provide amenity, be well designed, coordinated with the layout and fully overlooked
- Overground features such as basins and swales must demonstrate public use and amenity value in order to count towards POS
- All schemes should include source control features. Justification will be necessary if these components do not form part of the proposal



## Parking

- 5.10. This section sets out general principles relating to the provision of parking for new housing. Other solutions may be more appropriate in historic parts of the Borough or where a defining local characteristic requires it. In all cases developments will be expected to meet the Council's current parking standards. NPPF 39
- 5.11. The Council supports sustainable
  - transport measures such as car clubs and the promotion of walking and cycling, but any departure from the adopted standards will need to be justified to the LHA and supported with robust empirical evidence in an accompanying Transport Assessment, or Travel Plan. Developers are also encouraged to incorporate facilities for charging cars including plug-in **NPPF 35** services.
- 5.12. The requirement to accommodate car parking can have a significant affect on the quality of residential layout design. Successful layouts work by integrating parking into a development early in the design process, and not as an afterthought or as an issue addressed incrementally.

- 5.13. Car parking should be designed to compliment the housing typology and existing or intended street character. Streets should be designed as 'places' and car parking must be balanced to ensure various elements that create the street such as boundary treatments and street landscaping are considered together (Fig 85).
- 5.14. Car parking should not dominate the street or area. The over-use of grouped parking scenarios such as parking courts and lines of linear bays, will not be acceptable. Disorganised and different mis-matched parking arrangements along a street can lead to confused and disrupted rhythms.



- 5.15. Poorly planned arrangements and overbearing provision that compromises front gardens, and limits boundary treatments will be refused (Fig 84).
- 5.16. Insufficient space within a frontage to accommodate parking provision with a clear pedestrian route to the front door fails in function terms and is therefore poor design (Fig 84). Car parking that dominates the frontage or street and results in no other private, defensible space or public realm, also fails.
- 5.17. Visitor bays should be accommodated to best serve the development with special consideration to their provision close to apartments, terraces and play areas.





- 5.18. For most house typologies car parking should be accommodated within the true curtilage of the dwelling it serves referred to as "**on-plot**". The use of private pathways along sides and rear boundaries of properties to connect gardens or frontages to parking spaces is not considered "on-plot" parking and in most cases will not be acceptable (Fig 38, p25).
- 5.19. The use of **rear parking courtyards** can lead to underused and inhospitable environments. As such the use of them should be limited. Where courtyards are proposed they should be adequately surveyed with dwellings and landscaping located within them (Figs 86 & 87).



- 5.20. The design of parking should prevent conflict between quality and functionality and well planned, integrated parking can lessen the burden of maintenance and reduce potential for future problems between users and residents.
- 5.21. Communal parking areas (5+ cars), should include space for soft landscaping. In small isolated pockets planting usually fails and becomes a maintenance liability, so breaks of at least 1m are expected.
  Tree planting is the best landscaping to limit land take, increase impact, reduce maintenance and provide shade, shelter and seasonal variation within what may otherwise be a hard environment.



#### **Parking Checklist**

- Parking arrangements must be coordinated and support the street character. Mismatched parking arrangements and those that dominate the street scene or frontage will not be acceptable
- All parking spaces and the pedestrian routes to them must be safe, conveniently located and secure natural surveillance
- Visitor parking must be located to best serve the entire development
- All detached & semi-detached houses should have on-plot parking, not to the detriment of the frontage
- Rear courtyard parking should be limited to where no alternative is available
- Grouped parking should include 1m (min) breaks for trees & pedestrian access, approx' every 5 bays
- Cycle storage must be secure, well designed and convenient to access
- 5.22. **Cycle storage** must adhere to the LHA standards. It should be in a well-lit place close to the entrance point/s of the building, be secure and convenient to use.

## Refuse, Recycling

- 5.23. The storage of refuse and recycling wheelie bins and boxes must be fully accommodated within new developments. Lack of consideration of these aspects can negatively impact the functionality and attractiveness of a place over time.
- 5.24. Different solutions may apply depending on local characteristics and house type. Apartment blocks will require communal areas for waste and recycling collection and storage (Fig 88) whereas individual houses require this provision on-plot.
- 5.25. Within an apartment block design the refuse, recycling and cycle storage must be accessible for all residents and designed to harmonise with the scheme.



Well designed, convenient communal storage. Fig 88

49

- 5.26. Refuse, recycling and cycle storage may be housed in bespoke enclosures to the front of dwellings formed as part of each dwelling's frontage/defensible space. The example below (Fig 89) illustrates how this can be designed to support the quality of the street and provide a good threshold between public and private space, even for smaller units. The second example (Fig 90) illustrates what happens when this fails to be considered at the design stage with the streets littered with bins four days after collection day.
- 5.27. The location of refuse and recycling storage should also consider collection requirements.



Bespoke individual storage enclosures. Fig 89

#### **Refuse & Recycling Checklist**

- Storage of refuse and recycling should be well designed and fully integrated into the scheme.
- Storage of refuse and recycling should be convenient, secure, and accessible to all users
- Communal storage should be housed in well designed enclosures that compliment the scheme.
- 5.28. The design should ensure the storage facility is easily accessible from the public highway and achieves the minimum carrydistances as required by the Local Highway Authority standards.



Lack of defensible space or storage provision. Fig 90

### Utilities

- 5.29. Utility meter boxes, vents and flues can be visually disruptive when installed on main external walls or private paved areas of individual dwellings (Fig 91). With early and careful planning of service connections such requirements can be discretely located on side or rear elevations to avoid creating interrupting elements within the street scene. They can also be screened within bespoke enclosures to the front of dwellings, within ginnels, or on the side of a recessed entranceway (for example). The location of all such services must be indicated on the elevational drawings.
- 5.30. Ideally satellite dishes should not be visible from the public realm. Within large developments satellite transmissions can be provided via a main satellite receiving station to minimise visual clutter. Underground cable/and or shared satellite receiver stations should be considered in all major residential schemes (Fig 93)
- 5.31. Substation facilities must be located and designed to fit in with the surrounding development. It is often necessary to accommodate substations within enclosures (Fig 92) and these are more successfully disguised as single garages rather than large plastic utility housings.

## Servicing Checklist

- Utilities and Services (meter boxes etc.) should be located on side or rear elevations or hidden from view by landscaping.
- Satellite receiver stations should be considered on large schemes to avoid dishes on facades.
- Sub station housings should be accommodated within schemes and housed in complimentary materials



Poor utility positioning and no bin storage. Fig 91



Substation housed in complimentary structure. Fig 92



Services housed in complimentary structure. Fig 93



# Amenity

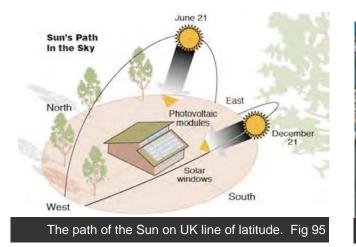
- 6.1. Development proposals must ensure adequate levels of daylight, sunlight, privacy, and outlook. In addition residents must be free from unreasonable noise, disturbance, smell and pollution. Developments must also deliver sufficient space to provide comfort and enjoyment, and promote good health and well-being.
- 6.2. It is important to ensure a consistent and fair approach to securing and maintaining amenity. A resident's ability to tolerate a lower level of amenity is not sufficient reason to permit an otherwise unacceptable proposal - planning permission goes with the land, not an individual.
- 6.3. An individual's rights to levels of amenity should be ubiquitous and the LPA will pay careful attention to the effect of development on the living conditions and amenity of residents - new and existing, in the wider public interest.
- 6.4. The methods set out here in order to secure sufficient residential amenity are not mutually exclusive, instead the helpfully serve more than one purpose separation distances for example can help address daylight, sunlight, privacy, outlook and help to secure private space.

## Daylight, Sunlight & Overshadowing

- 6.5. **Daylight** is the natural light from the sky, available from all directions, (including north), even when clouds hide the sun.
- 6.6. Sunlight (direct) is available on our line of latitude (with clear skies), (Fig 95) from the eastern, southern and western skies extending from a winter low angle (17° max) to a high angle in summer (60° max).
- 6.7. Overshadowing is governed by the size, position and orientation of the development, and by relative land levels. The width of a building is often as important as its height in terms of the overshadowing it may cause, because this will affect the length of time during which overshadowing will occur.
- 6.8. Backland and infill development proposals have the potential to significantly impact

upon existing neighbouring properties simply by their proximity. All developments will be assessed in terms of the impact on **daylight** and **sunlight** for existing and future occupiers and the potential for **overshadowing**.

- 6.9. Within schemes certain layouts can create amenity issues such as garages overshadowing gardens. This is particularly the case with set-back garages aligned north-south. In some cases a different house typology should be used to avoid this problem.
- 6.10. The availability of sunlight in private spaces (gardens) and public spaces (Fig 96) (parks, squares, play areas) is important for amenity and function. Their design must ensure 50% (min) of each space receives at least 2 hours of sunlight on the spring equinox (21 March).<sup>5</sup>



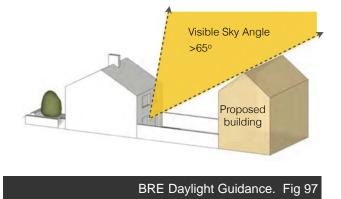


#### **Overshadowing Checklist**

At least 50% of each private and public amenity space must receive a minimum of 2 hours sunlight on the Spring equinox.

Developments should comply with the BRE daylight guidance.

6.11. The LPA will assess the effect of a proposal on the daylight available to adjacent dwellings by using British Research Establishment's (BRE) Site Layout Planning for Daylight and Sunlight (2011)(BRE 209). Proposals should not be positioned to compromise the daylight to an adjacent property's habitable room window as illustrated below.

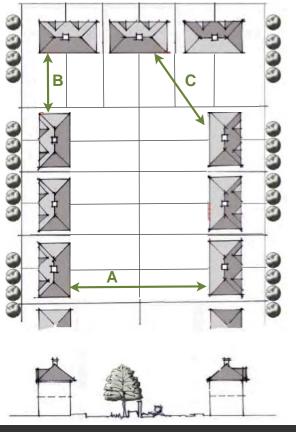


5. BRE 'Site Layout Planning for Daylight & Sunlight', Part 3.3

## **Separation Distances**

- 6.12. Separation distances (Fig 98) should be adhered to (in addition to the 45° rule), for non-mixed-use developments outside the Urban Core. These help to relieve the impact of development for existing residents and ensure good solar access to rooms and gardens all year round. Rearto-rear separation distances of 21m between dwellings are required for 2storey properties. This distance has been set by BRE by applying our latitude and ensures a minimum of 2 hours of solar access on the spring equinox. This also helps satisfy the privacy, outlook and amenity requirements of policy DE1.
- 6.13. The separation distances will be applied between existing residential properties and new proposals to provide greater certainty and security for residents next to potential development sites. The height of the highest of the relevant dwelling(s) must be used for the purposes of establishing separation distances.
- 6.14. If dwellings are set out at the minimum separation distance there will be limited opportunity for future extensions. In such cases it may be necessary to remove permitted development (PD) rights from those properties to protect amenity in the longer term.

6.15. There may be exceptional circumstances where the character of an existing area requires a different separation response and this will need to be demonstrated. A relaxation of these distances however will not be made solely because of high vegetation or a blocked view. Similarly an inability to achieve these separation distances does not justify the use of single aspect accommodation.



Separation distances provide privacy & amenity. Fig 98

#### **Separation Distances Checklist**

Developments that are not mixed use and fall outside the Town Centre area must secure the separation distances as a minimum:

#### A Rear to Rear

2-storey = 21m

- 3-storey = 24m
- (+3m for each additional storey)

B Rear to Side

2-storey = 12m

- 3-storey = 15m
- (+3m for each additional storey)
- C At an Angle

Rear to Side >45° apply B Rear to Rear <45° apply A

D Sloping sites

Add 1m separation for each 0.5m of ground level difference.

- Where only minimum standards are secured PD rights may be removed.
- 6.16. Design Codes are a useful tool to set out the character of a new development and different separation distances as well as frontage space are just two design considerations that may be set by such site specific documents.

## Outlook

- 6.17. **Outlook** is the external scene experienced from looking out from a house or private garden. It is important to consider what view a resident should be able to enjoy from within their home and garden protected from overbearing or oppressive development, buildings or elevations (Fig 99).
- 6.18. Outlook is therefore about the **proximity** of development as well as the **external attributes**.
- 6.19. **Proximity** of buildings is generally discussed in the previous section. Individual circumstances however, may mean the impact upon outlook for a resident requires a greater separation and more careful consideration. Such circumstances may include single aspect dwellings where the sole outlook is all important, or in ground-floor residences where land uses at street level have greater impact. This scenario is relevant to such dwelling types whether proposed or adjacent to a new development.
- 6.20. Attributes of a development can also affect outlook. Overbearing bland or poorly articulated elevations and walls, (Fig 99) tall roof shapes and poor quality materials that quickly degrade can all impact on outlook for a resident.

- 6.21. An outlook across a parking area or toward a service yard for example is highly undesirable especially from habitable rooms. Where parking dominates the frontage of properties, located close to the front of windows with no space for landscaping, or enclosures, etc. outlook is severely affected. This is not just for the host dwelling, but also for neighbouring homes and the street scene. A 4x4 or transit van parked next to the window of a property can have the same impact as a 6ft high wall. In such cases buffering by distance and landscaping will be expected.
- 6.22. Developments must also be compatible with nearby land uses and not compromise amenity with regards to noise, disturbance, smell or pollution. (NPPF 123) Separate legislation exists that governs much of these technical matters, but development that compromises amenity in this way or seeks to employ arbitrary solutions to the detriment of high quality design, will not be acceptable (see also Local Plan policies EN5 and EN7).

#### **Outlook Checklist**

- Single aspect dwellings and ground floor residences will not be accepted where their only outlook is across car parking spaces or communal areas with no defensible space or landscaping to aid privacy.
- Overbearing, bland, poorly articulated elevations or walls and poorly sited parking bays will not be acceptable.
- Development that is incompatible with existing nearby land uses that results in loss of amenity or compromised design solutions to address constraints will not be acceptable.



Overbearing, bland elevation provides nothing Fig 99

### Space

- 6.23. Internal and external space is an important amenity consideration. As a general rule of thumb the main external private garden space should be at least the same area as the footprint of the host dwelling<sup>6</sup>. For properties with more than 2-storeys this should be considerably larger and the separation distances required will assist to achieve this (Fig 89). For apartment blocks the external communal garden space should be at least the area of the ground floor unless context and character considerations dictate otherwise.
- 6.24. The nationally described space standards (Fig 101) provide a simple set of minimum areas relative to numbers of bedrooms and inhabitants and with reference to the storeys in the dwelling. The standards also provide for internal storage space required to accommodate recycling and refuse.
- 6.25. While the standards have not yet been adopted for Swindon, they have been repeated here for ease of reference as it is the LPA's intention to use them as a guide until such time as they are adopted and brought forward in line with the requirements as set out by the Government's Technical Housing Standards (March 2015).



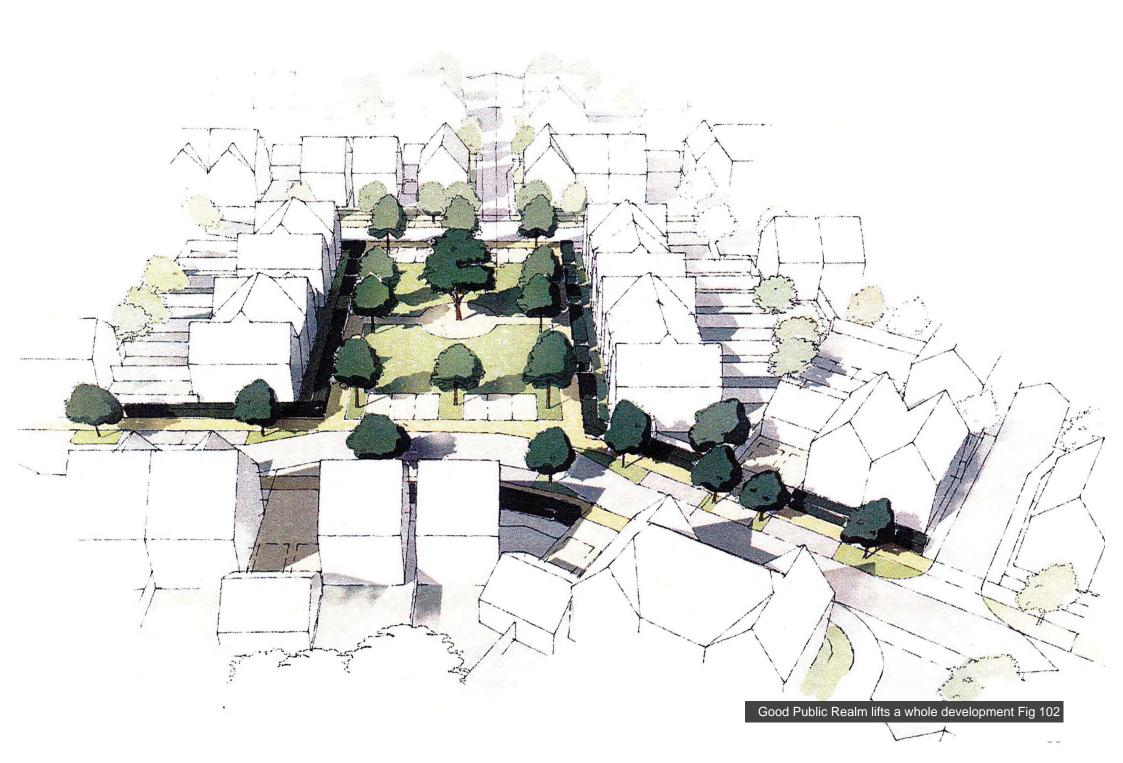
#### Garden Amenity Checklist

- Main private gardens should be larger than the footprint of the host dwelling.
- The external garden space for properties greater than 2-storeys should be considerably larger.
- The private communal external space for apartment blocks should be at least the area of the ground floor, subject to context and character considerations.

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	$39(37)^2$			1.0
	2p	50	58		1.5
2b	Зр	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6р	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	<u>6p</u>	103	110	116	3.5
	7p	112	119	125	
	<mark>8</mark> p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

2.

6. Tadpole Garden Village Design Code.



## Public Realm Quality

Public realm encompasses all public spaces and streets and the elements within them.

7.1. The quality of the public realm is at the heart of creating and maintaining a sense of place with identity and distinctiveness that functions well and can stand the test of time for future generations.

7.2. The creation of new public realm needs to generate places that are comfortable for people to enjoy and live in; places that are safe and attractive to walk through, and places that promote healthier lifestyles and community interaction

7.3. The public realm encompasses a wide range of places and elements. For the purposes of this document, it includes those elements that make up a street and/or public space such as shared surface areas, boundary treatments, street trees, public art, street furniture, and sustainable drainage systems where these are designed as multifunctional spaces.

Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as people's quality of life... NPPF paragraph 9

## Establishing public realm

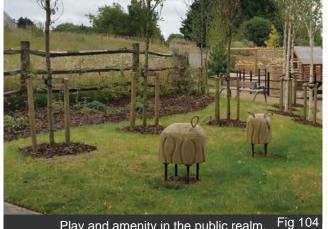
- 7.4. All proposals for development should establish a clear and logical concept for setting out the public realm structure. This must follow and support the scheme's context or "vision" for the creation of a new place. Adhering to a site's vision in this way defines the main elements of the scheme and ensures a strong and legible structure can begin to emerge.
- 7.5. The design process for a new housing development needs to be driven by a passion for the creation of good quality places (Fig 103). It requires imagination, ability, experience, tenacity, an eye for detail, sensitivity and most importantly a duty of care for our communities quality of life, health and well being. NPPF 58
- 7.6. Although housing falls mostly in private ownership it has a major impact on the adjoining public realm. Dwellings along a street provide the main spatial enclosure. The choice and arrangement of house typologies should signal the density, hierarchy and character and help establish the quality and experience of the public realm.



9 SWINDON RESIDENTIAL DESIGN GUIDE SPD 2016

## Public realm value

- 7.7. Public realm; whether it be formal public open space, a street with trees or small informal areas, must provide real meaning and value to the development and wider area. The value of public realm ultimately depends on the attractiveness and functionality of it. Well designed public realm leads to greater use and custodianship by the local community as well as becoming a desirable place to live.
- 7.8. The use of quality street furniture (Fig 105), materials and public art installations all contribute to the value of a place and help secure local identity. When these come together at places of community interaction such as retail hubs, schools and play spaces (Fig 104) they can combine to great effect.
- 7.9. If areas are meaningless, badly located or poorly executed they are less likely to encourage use. Unusable, strips of land or awkward spaces left over between dwellings do not contribute to the attractiveness or value of a place and are often costly to maintain leaving a lasting legacy of neglect and declining value. Such spaces will not be acceptable.
- 7.10. Multifunctional use of public realm can provide great benefits ranging from the economic and aesthetic value of attractive areas and streets (Fig 106), to the natural, ecological, physical and mental health benefits that such well-designed spaces and green infrastructure corridors can provide.
- 7.11. This does not have to be a complex arrangement -- trees in a street for example provide shade, seasonal variety, opportunities for wildlife, enclosure, and legibility. SUDs are another example where the transference of water above ground in shallow undulations can contribute to public space, habitat, identity and amenity.



Play and amenity in the public realm.





## Public realm maintenance

- 7.12. The shared common areas within new housing development such as the highway, footpaths, SUDs, services and public spaces must be designed to a high quality and where applicable to the adoption standards expected by the Council. Public places that are looked after can greatly enhance the perceived value of adjacent private areas. (Fig 107) The maintenance of such areas is as important as their installation.
- 7.13. In new areas of public realm not proposed for adoption, evidence will be required that suitable management companies are set up at an early date and membership arrangements and/or covenants are in place. Interim measures and contingency plans will also be required to ensure communal, and public areas are suitably managed in the interests of clarity and for future residents.



#### Public Realm Checklist

The structuring of the Public Realm must be evident and designed to support the Street hierarchy

- The choice of house types and enclosures must work with the public realm and streets to create a sense of place with identity
- Small, ineffective, semi-private spaces left in between the planned layout component parts will not be acceptable
- There must be a clear distinction between public and private space and the functionality of the public realm should be apparent
- Clarity is required about the future maintenance of public realm and the interim and contingency measures
- 7.14. While the viability of a scheme may kick start the process, a development idea purely governed by floorspace will never achieve the true potential in quality and value. Consideration must be given to the quality of 'place'; how it will be experienced and how the public realm and spaces between buildings contribute positively to make places better for people. NPPF 56

# Design Analysis

The various parts of a development collectively build up the places we all live, work and travel within and it is necessary to ensure these individual parts come together as a coherent whole. collectively assembled to form a strong character and usable place.

- 8.1. The character and quality of place results from many sometimes intangible things. The key physical elements however play a substantial role in contributing or detracting from place value. The quality of the components, how they are assembled together and the relationships between them all contribute to the experience of a place. These 'parts' comprise the physical elements of a development from public space to boundary treatments, porches to parking courts. The first part of this chapter sets out and considers those parts that come together to form a development.
- 8.2. A holistic approach is required to create successful streets and this includes the plot level. The quality of design when grouping houses is reliant on appropriate scale, massing and detailing in the form and architecture proposed for each house. If a house type or the component parts are poorly designed this will impact negatively on the entire street and its character. The second part of this chapter considers housing typologies and the different requirements for each to ensure they work within the wider street and public realm.

- Kit of Parts
- Aspects of Form
- Housing Typologies

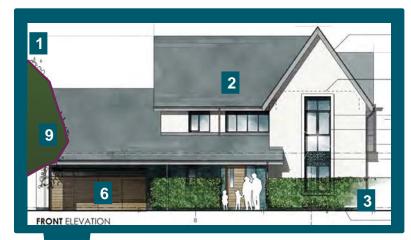
## Kit of Parts

- 8.3. Every place is formed from a number of component parts. These include the individual plot, the dwelling, its enclosure and boundary with the public realm, the frontage space, the private garden space, parking and vehicular access, street and its landscaping and areas of public space These parts are illustrated in Fig 108.
- 8.4. The success of places and streets depends on the quality of what forms them and how the component parts are arranged. This concept of the Kit of Parts is the essence of street composition and placemaking. A missing element or lack of balance and coherence between component parts can lead to a place functioning poorly, its quality declines and over time the area degrades further.

#### 1. Plot

- 2. Dwelling
- 3. Boundary Treatment
- 4. Frontage Space
- 5. Private Garden
- 6. Servicing & Parking
- 7. Street
- 8. Street Landscaping
- 9. Public space

8.5. Each part of a scheme relies on the others to uphold the quality, of the whole. The impact one failing element can have on the overall quality should not be underestimated and small details can make huge differences.



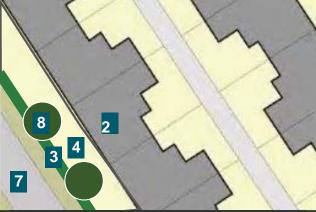


## The Aspects of Form

- 8.6. This next section explores what can happen to the overall quality of a scheme when policy DE1 is not followed and important elements from the Kit of Parts are missing entirely or when they are of a poor quality.
- 8.7. This first example (Fig 109) shows terraced housing within Swindon's Railway Village. The housing provides a strong continuous frontage along a street behind low walls and clipped hedges. The second example (Fig 110) is another terrace in the same town but 160 years later. This row is formed by four modern units. The two are comparable as they both comprise relatively high density terraces with no frontage car parking. Despite these similarities, there are clear differences.
- 8.8. In the first example, the presence and quality of the component parts;
  2 3 4 8 all contribute to the overall composition resulting in a high quality street scene.
- 8.9. In the second example, the omission of some of the Kit of Parts boundary treatments and meaningful frontage space, a leads the modern example to seriously fail in terms of high quality design.



Terraced housing with strong frontage treatment Fig 109



- © Crown Copyright database rights 100024296 2016
- Clear front boundary treatment 3
- Distinction of public/private realm 3
- Boundary and planting reinforces continuity of the street 3 + 8
- Secures area of defensible space 4
- Level access to each dwelling
- Hidden storage of utilities and waste



Terraced housing with no boundary treatment Fig 110



© Crown Copyright database rights 100024296 2016
No front boundary treatment
No distinction of public/private realm
No sense of defensible space
Poor access - steps to each dwelling encroach in limited frontage area 4
No space for planting or street trees
Utilities and waste storage on show

## Strong Layout and Form

- 8.10. These next two examples (Figs 111 and 112) exhibit layout similarities. Both are within Swindon and comprise formal layout arrangements with crescents, squares and symmetry across the streets. At the detailed level however clear differences emerge owing to the contrast in the quality of the Kit of Parts.
- 8.11. In the first example (Fig 111) the key elements noted before are present boundary treatments define the public and private space and the scale of the buildings enclose the space well with a key building to terminate views. Window boxes provide additional interest against the backdrop of consistent openings and materials and two areas of formal green space add character.
- 8.12. The Kit of Parts are designed as a composition and form a successful place.
  - Public space sizable & meaningful E
  - Scale and proportion of dwellings **B** provides a strong street enclosure
  - Railings define private frontages A
  - Consistent form, materials openings & details **D**
  - Street parking doesn't detract
  - Refuse and recycling out of view



SWINDON RESIDENTIAL DESIGN GUIDE SPD 2016



# Weak Form and Detailing

8.13. In this second example (Fig 112) many of the key component parts are lacking and in some cases missing entirely. Although the building height is also 3-storey the relationship with the street is weak owing to a lack of enclosure. There are no boundary treatments to define the public

<sup>-</sup>private space leaving planting vulnerable and the large areas of tarmac g spill out each side of the street. The long view is not terminated in any building or feature H encouraging higher car speeds. Although built form across this part of the street is symmetrical further along it is not and materials are inconsistent.

8.14. The planting shown between a blank wall and footway does little to contribute to the public realm and will be difficult to maintain. Car parking dominates and utilities are visible.

Lack of meaningful public realm K

Built form broken **G** lacks street enclosure & boundary treatments **F** 

No vista termination H

Car parking dominates street scene

Irregular built form I & materials J

Small left over areas with weak planting, difficult to maintain **K** 

# Typologies

- 8.15. Although housing falls mostly in private ownership it has a major impact on the adjoining public realm. Dwellings along a residential street provide the main spatial enclosure. The type and arrangement of house typologies in relation to each other and to the street, help establish the quality and experience of the public realm.
- 8.16. This section sets out some examples of different dwelling typologies on their plots and how the consideration of the Kit of Parts should ensure adequate and appropriate responses. Not all solutions will be applicable for all locations or for all house types and that is why it is important to look in detail at the typologies.
- 8.17. The typologies examined include: terraces, apartments, detached and semidetached dwellings and mews and courtyard buildings. In the majority of cases, by grouping similar typologies or creating a rhythmic distribution of typologies along a street, a strong, definitive character can be established.
- 8.18. Context is also a key consideration as grouped typologies may not be the appropriate design response in some smaller schemes or rural locations. Fig 8 (pages 11-12) lists where different typologies are most appropriate.

- 8.19. The Railway workers housing in Swindon has resulted in ordered and regular rhythms of streets and housing, echoed through the 19th and 20th Centuries within Old Town (Fig 113) and across other historically established parts of the Town. The grouping of similar house typologies creates a strong sense of place along a street or space and this approach has featured strongly in many modern award winning schemes (Fig 114).
- 8.20. Such regularity and consistency in the grouping of the parts creates order, legibility, and a uniform interface with the public street. It also allows elements such as car parking and street trees to be arranged in a complimentary and efficient manner.
- 8.21. A holistic approach is required to create successful streets. While the layout principles may work when grouping a particular house type, if that house type is poorly designed then this will impact negatively on the entire streetscene and its character.



C19th ordered, regular rhythms and typologies Fig 113



## Terraces

- 8.22. Terraces often work best as a continuous row of a repeated housetype (Fig 115/116) whether in straight, staggered or crescent layouts. The component parts of such terraces need to ensure the rhythmic qualities can be satisfactorily repeated.
  Terracing using varied housetypes may also work, provided the scale and materials of each dwelling relates well to the overall street.
- 8.23. Previous examples have shown the impact on the street when a terrace has no boundary treatment and inadequate frontage (Fig 110 page 64). Boundary treatments to protect frontage space are key to creating enclosure and are expected in terraces.
- 8.24. Terraced properties with on-street parking arrangements should have adequate frontage widths to ensure one car parked parallel or two cars parked perpendicular with pedestrian access, is accommodated. This ensures parking is convenient and does not dominate or disrupt the street.
- 8.25. To avoid visual clutter bespoke enclosures to the front of dwellings for bikes, refuse and recycling are encouraged. If there is no integral front storage then safe and convenient rear access will be necessary using ginnels in central dwellings.



Varied terraces with consistent frontage space Fig 115



Component parts of repeated terrace houses should be designed to be repeated rhythmically

The scale and materials of varied terrace houses must relate well as an overall composition

Each property must have frontage space [4] & boundary treatments [3] in keeping with the street character

Terraces with on-street parking to the front should be wide enough to ensure one parallel space or two perpendicular spaces with pedestrian access can fit within each dwelling width

Bespoke front enclosures for storage is encouraged. Where this is not possible rear/side access must be provided for each property incorporating ginnels

- 1. Plot
- 2. Dwelling
- 3. Boundary Treatment
- 4. Frontage Space
- 5. Private Garden
- 6. Servicing & Parking
- 7. Street
- 8. Street Landscaping
- 9. Public space

## **Apartment Buildings**

- 8.26. Apartment buildings are often the largest dwelling type used in a layout. They are sometimes used as landmarks and vista terminations and as such their associated Kit of Parts such as frontage and landscaping, must be adequately sized in scale with their built form and support their contribution to the street character.
- 8.27. Apartments that follow or mark a corner position must be sufficiently articulated to front both aspects providing character and casual surveillance to the streets.
  Entrances should be direct, clearly visible from the street and ensure accessibility for all users (Fig 117).
- Entrances should be direct visible & accessible Fig 117

- 8.28. For amenity, health and wellbeing, all apartments should be dual aspect and all habitable rooms including kitchens and bathrooms are expected to achieve natural ventilation through windows.
- 8.29. Separate rear entrances for servicing of refuse, recycling and bicycle storage, etc. must be convenient, highly accessible and adequately overlooked..
- 8.30. Adequate external private outdoor space is expected for each residence either through a rear garden, a larger communal landscaped area (Fig 118) or a useable balcony. An area of 10m<sup>2</sup> is suggested per apartment.



- The Kit of Parts must be in scale with the associated apartment and support the street character
- Apartments that follow or mark a corner must have articulated frontages on both public façades
- Entrances to apartments must be clearly marked, accessible and visible from the public realm
- Each apartment should be dual aspect with windows providing natural ventilation
- Each apartment should includes outdoor private or grouped amenity space, or a useable balcony
- Servicing should be grouped, easily accessible and designed as part of the overall composition
- This typology is usually only appropriate in urban, urban core and village core areas and occasionally in sub-urban areas (Fig 8, pages 11-12)

## **Detached Dwellings**

- 8.31. Generally detached properties should have sufficient frontage space to be in scale with the dwelling, the context and provide a landscaped setting (Fig 119). Front boundary treatments however are not always necessary in urban fringe and rural locations or as part of an intended character.
- 8.32. Car parking must be on-plot and is generally best placed to the side of the dwelling set back from the building line.Storage of bikes, refuge and recycling must be accommodated to the rear.

## Semi-detached Dwellings

- 8.33. Pairs of houses or "semis" are often a successful typology. They are synonymous with a suburban character and suit articulated frontages (Fig 120) often including bays and projecting gables. Flat fronted semi-detached properties are rarely successful.
- 8.34. Boundary treatments are essential to enclose the private landscaped frontage space and parking is best served to the side, set back from the boundary. The storage of bikes, refuge and recycling should be accommodated to the rear.





Detached properties should have landscaped frontage space in proportion with the dwelling

- Detached properties front boundary treatments are encouraged but not always necessary in some character areas
- Car parking must be on plot and generally set back behind the building line for detached properties and behind the boundary treatment for semi-detached houses
- Bike, refuge and recycling storage must be to the rear
- Semi-detached properties should have articulated frontages (porches, projecting gables, bays, etc.)
- Semi-detached properties must have boundary treatments and private frontage space
- These typologies are usually only appropriate in sub-urban, urban fringe and village/rural locations (Fig 8, pages 11-12)

# **Mews Buildings**

- 8.35. Mews buildings within courtyards often comprise small scale dwellings and flats over garages (FOGs). Whilst parking courtyards should be limited in number and scale it is recognised in some instances, the block structure will necessitate them. In such cases they should include shared surface space, planting and dwellings to ensure placemaking and provide activity and surveillance.
- 8.36. Dwellings with integrated parking at ground floor work well within Mews areas (Fig 121) providing parking and interest.

- 8.37. Mews buildings do not always have private frontage or boundary treatments. Where this is the case space should be made for tree planting and there should be a single surface treatment such as setts or blocks (Fig 122).
- 8.38. The previous guidelines for the other housetypes apply within mews except in relation to frontages, boundary treatments and car parking. Each FOG unit must include its own garaging, as well as storage for bikes, refuse and recycling. Other parking arrangements should still adhere to the general guidelines on pages 47 to 48.

Courtyard areas should include shared surface space, planting and dwellings

- Courtyard areas that include Mews buildings with no private dwelling frontages should include space for street tree planting
- Courtyard areas should include different surface treatment to distinguish it from the main streets
- Each FOG unit must include its own garaging as well as storage space
- These typologies are usually only appropriate in urban courtyards and rural locations. (Fig 8, pages 11-12)





# Glossary

## Accessibility

The ease with which a building place or facility can be reached by people and /or goods and services. Accessibility can be shown on a plan or described in terms of pedestrian and vehicle movements, walking distance from public transport, travel time or population distribution. *(Dictionary of Urbanism)* 

## **Active Frontages**

Building faces that add interest, life and vitality to the streetscape.

Active frontage development is buildings whose entrances front on to a road or street. (Dictionary of Urbanism)

## Adaptability

The ability to adjust to changing circumstances and uses over time.

The capacity of a building or space to respond to changing social, technological economic and market conditions. Adaptability is recognised as an important objective of urban design. *(Dictionary of Urbanism)* 

'It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change' *Charles Darwin* 

## Amenity

The pleasant or normally satisfactory aspects of living conditions including daylight, sunlight, privacy, outlook and freedom from unreasonable noise and disturbance, that contribute to the enjoyment of residents and visitors.

The term's meaning is a matter for the exercise of planners' direction, rather than being defined in law. (*Dictionary of Urbanism*)

## Backland

Land behind an area which is built or otherwise developed.

## **Biodiversity**

The variety of flora and fauna in the world or particular habitat.

## **Building Line**

The line in front of which no buildings protrude. It is often established by extending a line along, using the principal elevation of a building or a group of buildings fronting a street. A clear building line is not always possible to establish in all situations and staggered or varied frontages may result in a less clear or no single building line.

The line formed by the frontages of buildings along a street. (*Dictionary of Urbanism*)

## Connectivity

The strength, quantity and quality of links to the surrounding environment.

The degree to which a place is connected by routes to other places and to which its own parts are connected to each other. *(Dictionary of Urbanism)* 

#### **Conservation Areas**

An area of notable environmental or historical interest or importance which is protected by law against undesirable changes.

A designation made by a local authority under the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990 on a site possessing special architectural or historical interest. The Council will seek to preserve or enhance the character and appearance of such areas. Conservation areas were first introduced by the Civic Amenities Act 1967

## **County Wildlife Sites**

Areas of land recognised as being at least county, sometimes national, importance for their nature conservation value; this is defined by the presence of important, distinctive and threatened habitats and species.

## **Desire Lines**

Emerge from short cuts taken away from designated pathways.

The shortest, most direct route between facilities or places. Even when obstacles or difficulties are in the way, people will still try to follow the desire line, so it makes sense to accommodate desire lines in a plan as far as practicable. (*Dictionary of Urbanism*)

#### Enclosures

The space between buildings. Building elevations and the cross sections of public spaces should be scaled to foster a sense of enclosure.

## **Energy Efficiency**

The use of layout design to maximise the sun's heat and light energy for residential properties.

The result of minimising the use of energy by transport, through the planning of settlements, and through the way in which buildings are constructed and arranged on site. (Dictionary of Urbanism)

#### Fascia

Boarding material that covers the ends of rafters of a roof structure; also the signage board showing the name of the shop above a traditional shopfront.

#### Fenestration

The design, arrangement, size and proportion of windows and some other openings within a building.

#### Form

The detailed aspects that make up the threedimensional configuration of the built environment.

In architecture, form is a noun. (Dictionary of Urbanism)

#### Ginnel

A narrow passage shared between two dwellings (buildings).

#### Habitable room

Rooms in which people are likely to spend a considerable amount of time. This excludes landings, hallways, toilets, bathrooms, service rooms, utility rooms or similar non-living spaces.

A room used for living purposes, excluding kitchens with floor area of less than 13 sq m (140 ft), bathrooms, toilets, corridors and halls. (*Dictionary of Urbanism*)

## **Juliet Balcony**

A railing or enclosure to provide a safety barrier in front of glazed doors above ground floor level.

#### Inclusive

A development that facilitates and responds positively to all user groups.

Designing the built environment, including buildings and their surrounding spaces, to ensure that they can be accessed and used by everyone. (*Dictionary of Urbanism*)

## Infill

New building in a gap between existing buildings or within an area.

Building on a relatively small site between existing buildings. (*Dictionary of Urbanism*)

#### Layout efficiency

The best use of land through the optimum organisation of a development.

## Legibility

The extent to which a place is recognisable and coherently organised.

The quality of a place being welcoming understood easily by it's users, easy for visitors to orient themselves in, and presenting a clear image to the wider world. *(Dictionary of Urbanism)* 

#### **Local Development Framework**

The portfolio of Local Development Documents, which collectively provide the framework for delivering the spatial strategy for the Borough.

## **Material Consideration**

The statutory planning documents and Government statements of planning policy, which must be taken into account in reaching decisions on planning applications. Other matters, if they have regard to the objects of planning control, may also be material, including supplementary planning documents.

#### Massing

The three-dimensional development envelope and proportions, rhythms and patterns of it. the combined effect of the arrangement, volume, and shape of the building or group of buildings. Also called bulk. *(Dictionary of Urbanism)* 

### **Means of Enclosure**

The physical or sense of definition of space or area. This is often denoted as a wall, railings or hedge in residential development to define the edge of the public-private realms.

#### **Natural Surveillance**

A passive dialogue between people passing a building being aware if the overlooking created by those within the building.

The discouragement to wrong-doing by the presence of passers-by or the ability of people to see out of windows. (*Dictionary of Urbanism*)

#### Nodes

A point in a network at which lines or pathways intersect or branch.

A place where activity and routes are concentrated; a point of interchange in a transport network. Also known as a vertex. (*Dictionary of Urbanism*)

They may be primary junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Or the nodes may be simply concentrations, which gain their importance from being the condensation of some use or physical character, as a streetcorner hangout or an enclosed square. *Kevin Lynch (1960)* 

#### Orientation

The direction in which the proposed building faces.

#### Outlook

The ability to look out from a property unencumbered by overbearing development. It is not a vista to a specific point or a protected view out over open land. Instead it acknowledges that residents are entitled to protection from the effect of buildings in close proximity to ensure they are not oppressive.

#### Overlooking

The ability to view something, especially from above. Excessive overlooking can lead to a lack of privacy and loss of amenity.

#### **Passive Surveillance**

(See Natural Surveillance)

#### Permeability

The measure of how easy or difficult it is to move through all parts of a development.

The degree to which an area has a choice of routes through it; the condition of being permeable. Permeability has long been considered as one of the central principles of urban design. A variety of pleasant, convenient and safe routes (as opposed to layouts in big blocks with no way through) is thought to make a place better suited to people on foot. (*Dictionary of Urbanism*)

#### Proportion

A part considered in relation to the whole. When these relationships are agreeable - they form a harmonious or balanced relationship between forms.

#### **Public Realm**

Public spaces in the form of streets and spaces (both hard and soft landscaped).

## Public Realm (cont'd)

Includes (but not limited to) those elements that make up a street and / or a public space such as shared surface areas, boundary treatments, street trees, public art, street furniture, and can also include areas devoted to the creation of a sustainable drainage strategy where these are designed as multi-functional spaces.

#### **Rectilinear Block Structure**

Streets arranged primarily in straight lines and structured to create linear, rectangular-shaped development blocks.

#### Rhythm

A strong, regular repeated feature or pattern of design.

## **Rights of Way**

The legal right to pass along a specific route through grounds or property belonging to another.

## Roofscape

A scene or view of roofs appreciated as a composition usually within the wider landscape.

## Scale

The size of built form as a relative concept, relative to context, character, public realm and human scale.

## Setting

The setting of a heritage asset is the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral (NPPF glossary).

## Siting

The configuration and relationship of a building's footprint to the existing context, character and the vision for the development.

## Sites of Special Scientific Interest (SSSI)

SSSI are legally protected under the Wildlife and Countryside Act 1981. They represent the country's best wildlife and geological sites.

## **Social Cohesion**

The degree of social integration and inclusion in communities.

One where there is a common vision and a sense of belonging for all communities; the diversity of people's different backgrounds and circumstances is appreciated and positively valued; those from different backgrounds have similar life opportunities; and strong and positive relationships are being developed between different people from different backgrounds, in the workplace, in schools, and within neighbourhoods. *(The Home Office)* 

## **Statement of Community Involvement**

Sets out the standards that the Council will achieve in involving local communities in the preparation of Local Development Documents and development control decisions.

## Supplementary Planning Document

Guidance produced to accompany policy developed in the Council's Local Plan as part of the Local Development Framework.

## Sustainable Drainage

A sustainable drainage system (SuDs, SuDS, SUDS) is designed to reduce the potential impact of new and existing developments with respect to surface water drainage discharges.

## Tandem Development

Backland development where a new dwelling is placed immediately behind an existing dwelling.

## Townscape

The visual appearance of an urban landscape. The appearance of streets, including the way the components of a street combine in a way that is distinctive to a particular locality. (*Dictionary of Urbanism*)

## Townscape (cont'd)

One building is architecture, but two buildings is townscape. *(Gordon Cullen)* 

## Utility

The practicality or usefulness required of aspects of development in order to aid their functionality.

## Abbreviations & Acronyms

AONB - Area of Outstanding Natural Beauty

**BRE** - British Research Establishment

**CABE** (Now part of Design Council CABE) Commission for Architecture and the Built Environment

CWS - County Wildlife Site

**EIA** - Environmental Impact Assessment

GI - Green Infrastructure

**IHBC** - Institute of Historic Building Conservation

LAP - Local Area of Play

LEAP - Local Equipped Area of Play

LPA - Local Planning Authority

**NEAP** - Neighbourhood Equipped Area of Play

**NPPF** - National Planning Policy Framework

POS - Public Open Space

**RIBA** - Royal Institute of British Architects

RICS - Royal Institute of Chartered Surveyors

RTPI - Royal Town Planning Institute

**SBC** - Swindon Borough Council

SBLP - Swindon Borough Local Plan

- SPD Supplementary Planning Document
- **SSSI** Site of Special Scientific Interest
- SUDs Sustainable Drainage Systems

## References

- Swindon Borough Local Plan 2026
- Swindon Central Area Action Plan
- The Marmot Review Fair Society, Healthy Lives, Strategic Review of Health Inequalities in England post 2010. (See Policy Objective E, p126)
- National Planning Policy Framework 2012
- DCLG The Government's National Housing Standards Review - (Nationally Described Space Standard 2015).
- Barton H, Grant M & Guise R (2010):
   'Shaping Neighbourhoods for Health and Global Sustainability,' 2nd Edition.
- Housing Network and Improvement Learning Principles
- Robert Cowan (2005) "A Dictionary of Urbanism"
- Paul J Littlefair (2011) BR 209 Site Layout
   Planning for Daylight and Sunlight, A Guide to
   God Practice

# List of Figures & Photo Credits

FIG 1 (P1-2): SWINDON PHOTO MONTAGE INCLUDES: (TOP, LEFT-RIGHT): IVERY HOUSE, WROUGHTON; RAILWAY VILLAGE; THE MILL, BAKERS ROAD, WROUGHTON; THE MILL, REDHOUSE; (MIDDLE) TADPOLE GARDEN VILLAGE (BOTTOM ROW): WESTLECOTT ROAD, OLD TOWN; FORMER CHAIN TEST HOUSE SITE, RAILWAY WORKS ©THOMAS HOMES; DUNLEY CLOSE, REDHOUSE; ANGEL RIDGE, OLD TOWN.

FIG 2 (P3): CHAIN TEST HOUSE RESIDENTIAL CONVERSION BY THOMAS HOMES, RAILWAY WORKS, SWINDON.

FIG 3 (P5): PHOTO MONTAGE (TOP TO BOTTOM, LEFT-RIGHT): OLD TOWN GARDENS, CONTEMPORARY PROJECTING BALCONY (MG); RAILWAY VILLAGE; ACCORDIA, CAMBRIDGE; TRIANGLE SITE, HOWSE GARDEN, SWINDON; PRIVATE AMENITY SPACE INTERNAL APARTMENT COURTYARD (MG), LONDON; ANGEL RIDGE PLAY AREA; LOCAL SWINDON BRICK. (MG) photo credit: Michael Gray

FIG 4 (P6): COLLABORATIVE DESIGN PROCESS BY MDC TEAM.

FIG 5 (P7): SWINDON DESIGN REVIEW PANEL LAUNCH AT STEAM MUSEUM, SWINDON JULY 2016 BY MDC TEAM.

**FIG 6** (P9): SWINDON CONTEXT PHOTO MONTAGE: (LEFT): FIGURE GROUND OF SWINDON URBAN AREA; (RIGHT, TOP-BOTTOM): VIEW OF LIDDINGTON HILL; HIGHWORTH; PALETTE OF LOCAL MATERIALS, COLOURS AND TEXTURES FOUND IN CHISELDON.

FIG 7 (P10): CONTEXT & CHARACTER CONSIDERATIONS.

FIG 8 (P11-12): SWINDON'S URBAN AND RURAL FORM MATRIX.

FIG 9 (P13): WESTLECOTT ROAD, OLD TOWN.

FIG 10 (P14): ACCEPTABLE INFILL DEVELOPMENT SKETCH.

FIG 11 (P14): UNACCEPTABLE INFILL DEVELOPMENT SKETCH.

FIG 12 (P14): THE GRANGE, BLUNSDON ST ANDREW.

FIG 13 (P15): HOUSE GARDENS DEVELOPMENT, SWINDON

FIG 14 (P15): NURSERY LANE, LONDON, BY LONDON REALITY DEVELOPMENTS.

FIG 15 (P15): BACKLAND DEVELOPMENT, GROVE HILL, HIGHWORTH.

**FIG 16** (P16): ACCEPTABLE BACKLAND DEVELOPMENT SKETCH WITH GARDEN SIZES PRESERVED.

FIG 17 (P16): UNACCEPTABLE TANDEM DEVELOPMENT SKETCH

FIG 18 (P17): WILLIAM MORRIS WAY, TADPOLE GARDEN VILLAGE, ARTS & CRAFTS.

FIG 19 (P17): CONTEMPORARY HOUSE, TADPOLE GARDEN VILLAGE.

FIG 20 (P19): ANGEL RIDGE PLAY AREA, OLD TOWN.

FIG 21 (P19): FORMER GWR SPORTSFIELD, OCOTAL WAY, SWINDON, DAVID WILSON HOMES.

FIG 22 (P20): SPACE ANALYSIS TOOLS MEASURING CONNECTIVITY.

**FIG 23** (P20) HOUSE FRONTAGES GIVE CASUAL SURVEILLANCE. CULVERHOUSE ROAD, SWINDON.

FIG 24 (P20): MARLBOROUGH PARK, SWINDON CONNECTIVITY DIAGRAM.

FIG 25 (P21): CLOSED BLOCK STRUCTURE DIAGRAM.

**FIG 26** (P21): CLOSED, POOR PERMEABILITY OWING TO FENCES, OLD TOWN, SWINDON.

FIG 27 (P21): PERMEABLE BLOCK STRUCTURE DIAGRAM.

77 SWINDON RESIDENTIAL DESIGN GUIDE SPD 2016

FIG 28 (P21): PERMEABLE ROUTES, UPTON, NORTHAMPTON. FIG 29 (P22): PUBLIC ART AT PORTISHEAD, BRISTOL. FIG 30 (P22): KEY BUILDING, MARLBOROUGH PARK, SWINDON. FIG 31 (P23): BENCH IN LANDSCAPED PUBLIC REALM, OLD TOWN. FIG 32 (P23): YELLAND WALK, EAST WICHEL, SWINDON. FIG 33 (P23): TADPOLE GARDEN VILLAGE, SWINDON. FIG 34 (P24): CONTEMPORARY APARTMENT ENTRANCE, LONDON. (MG). FIG 35 (P24): ABILITY TO WORK FROM HOME, STOCK PHOTO, LONDON. FIG 36 (P24): RECTILINEAR PLOT CONFIGURATIONS, OLD TOWN, SWINDON. FIG 37 (P25): BAY WINDOW, NEWHALL, HARLOW. FIG 38 (P25): REAR ACCESS WAY, OLD TOWN. FIG 39 (P25): GINNEL, EAST WICHEL, WICHELSTOWE. FIG 40 (P26): FRONTAGES, IRONSTONE CLOSE, REDHOUSE, SWINDON. FIG 41 (P26): PARKING COURTYARD, ENDEAVOUR ROAD, SWINDON. FIG 42 (P26): CONTEMPORARY GLAZING, MEWS BUILDING, OXFORD. FIG 43 (P27): OPEN SPACE, MAIDA VALE, HAYDON END, SWINDON. FIG 44 (P27): PUBLIC REALM, LONDON. (MG) FIG 45 (P28): EAST-WEST STREET ALIGNMENTS, EAST WICHEL, SWINDON FIG 46 (P28): GLAZING TO SOUTH TO MAXIMISE LIGHT AND SOLAR GAIN. FIG 47 (P29): VIEW ACROSS SWINDON FROM THE LAWNS.

FIG 48 (P31): FIGURE GROUND, OLD TOWN. FIG 49 (P31): TERRACES IN DURHAM. FIG 50 (P31): HIGH STREET, WROUGHTON. FIG 51 (P32): KEY BUILDING, DUNLEY CLOSE, REDHOUSE. FIG 52 (P32): EASTBURY WAY, SWINDON. FIG 53 (P32): EAST WICHEL, SWINDON. FIG 54 (P33): VISTA TERMINATION, MARLBOROUGH PARK, SWINDON. FIG 55 (P33): CORNER BUILDING, ACCORDIA, CAMBRIDGE. FIG 56 (P33): CORNER BUILDING, LAKESIDE. FIG 57 (P34): PUBLIC SPACE, UPTON, NORTHAMPTON. FIG 58 (P34): NEWHALL, HARLOW. FIG 59 (P35): 3D ILLUSTRATION, TOWN CENTRE, SWINDON. ©MET WORKSHOP FIG 60 (P35): 3D ILLUSTRATION, TOWN CENTRE, SWINDON. ©MET WORKSHOP FIG 61 (P35): CONFLICTING EMPHASIS, LONDON. FIG 62 (P36): BLAND FRONTAGE, LONDON. FIG 63 (P36): HORIZONTAL EMPHASIS, MARLBOROUGH ROAD, SWINDON. FIG 64 (P36): VERTICAL EMPHASIS, HAYMAN CRESCENT, SWINDON. FIG 65 (P37-38): MATERIALS AND COLOURS ACROSS SWINDON BOROUGH. FIG 66 (P39): LONDON, (MG) FIG 67 (P39): WINDSOR

FIG 68 (P39): THOMAS HOMES DEVELOPMENT, FIRE FLY AVENUE, SWINDON.

FIG 69 (P40): LONDON, (MG)

FIG 70 (P40): RHYTHMICAL HOUSING FORMS, RAILWAY VILLAGE, SWINDON.

FIG 71 (P40): STREET TREES, PORTLAND AVENUE, SWINDON.

FIG 72 (P41): BALCONIES, HAYMAN CRESCENT, SWINDON.

FIG 73 (P41): BALCONIES, HOOPERS PLACE, SWINDON.

FIG 74 (P41): GINNELS, EAST WICHEL, SWINDON.

FIG 75 (P42): RAILINGS ALONG DOWNLAND CLOSE, SWINDON.

FIG 76 (P42): BOUNDARY WALL, SPODE CLOSE, SWINDON.

FIG 77 (P42): LEVELS, GROUNDWELL, SWINDON.

FIG 78 (P43): DETAILS MONTAGE (TOP TO BOTTOM, LEFT TO RIGHT), LACK OF FRONTAGE ENCLOSURE, NORTH SWINDON; UNENCLOSED SUBSTATION, NORTH SWINDON; STORAGE ENCLOSURE, (MG); DOOR AND SURROUND, OLD TOWN, SWINDON; BALCONIES, PORTISHEAD; CORNER BUILDING, NORTH SWINDON; NON-FLUSH THRESHOLD, GROUNDWELL, SWINDON; RAILINGS NOT ON PLINTHS, NORTH SWINDON; BAYS AND PORCHES, NORTH SWINDON; ARTICULATED FRONTAGE, PORTISHEAD; RAILINGS ON LOW WALLS; NORTH SWINDON.

FIG 79 (P45): SUDS DIAGRAM, MDC TEAM, SBC.

**FIG 80** (P45): CLOSED OFF OPEN SFACE OWING TO POOR SUDS DESIGN, ALEXANDRA PARK, SWINDON.

FIG 81 (P45): SUDS DESIGNED WITHIN THE STREET, UPTON, NORTHAMPTION.

FIG 82 (P46): THE SUDS "TRAIN" BASED ON THE EA MODEL, MDC TEAM, SBC.

FIG 83 (P46): WETLAND AREA, MOULDON HILL, SWINDON.

FIG 84 (P47): CAR PARKING ON PAVEMENTS, PORTLAND AVENUE, SWINDON.

FIG 85 (P47): INTEGRATED PARKING, HAYMAN CRESCENT, SWINDON.

FIG 86 (P48): REAR PARKING COURTYARD, PORTISHEAD.

FIG 87 (P48): REAR PARKING COURTYARD, NORTH SWINDON.

FIG 88 (P49): COMMUNAL STORAGE FACILITY, (MG).

**FIG 89** (P49): FRONTAGE ENCLOSURES WITH STORAGE, HOWSE GARDEN, SWINDON.

**FIG 90** (P49): NO FRONTAGE ENCLOSURE OR STORAGE SPACE, PORTLAND AVENUE, SWINDON.

FIG 91 (P50): UTILITIES, ENDEAVOUR ROAD, SWINDON.

FIG 92 (P50): SUBSTATION HOUSING, (MG).

FIG 93 (P50): SERVICES HOUSING, (MG).

FIG 94 (P51): STANTON FITZWARREN, SWINDON.

**FIG 95** (P53): A DIAGRAM OF THE SUN'S PATH ON THE WINTER AND SUMMER SOLSTICES, DOE.

FIG 96 (P53): PRIVATE AMENITY SPACE, NORTH SWINDON.

FIG 97 (P53): BRE DAYLIGHT GUIDANCE (MDC TEAM, SBC).

FIG 98 (P54): SEPARATION DISTANCES, MDC TEAM, SBC.

FIG 99 (P55): BLAND ELEVATION, NORTH SWINDON.

FIG 100 (P56): REAR PRIVATE AMENITY SPACE, DURHAM.

FIG 101 (P56): DCLG TECHNICAL HOUSING STANDARDS (MARCH 2015)

FIG 102 (P57): SKETCH OF TADPOLE GARDEN VILLAGE, BY PAD DESIGN.

**FIG 103** (P59): MONTAGE OF PUBLIC REALM (TOP TO BOTTOM, LEFT TO RIGHT), LETCHWORTH GARDEN VILLAGE; THOMAS HOMES, FIRE FLY WAY, SWINDON; TADPOLE GARDEN VILLAGE, SWINDON; LONDON, (MG); UPTON, NORTHAMPTON.

FIG 104 (P60): PLAY AREA, ANGEL RIDGE, SWINDON.

FIG 105 (P60): SEATING WITHIN THE PUBLIC REALM, ANGEL RIDGE, SWINDON.

FIG 106 (P60): PUBLIC ART, PORTISHEAD.

FIG 107 (P61): PUBLIC REALM, ANGEL RIDGE, SWINDON.

FIG 108 (P63): THE KIT OF PARTS, MDC TEAM, SBC.

**FIG 109** (P64): TERRACED HOUSING, STRONG ENCLOSURES, RAILWAY VILLAGE. SWINDON.

**FIG 110** (P64): TERRACED HOUSING WEAK ENCLOSURES, ENDEAVOUR WAY, SWINDON.

FIG 111 (P65): FORMAL LAYOUT, EDGAR CLOSE, NORTH SWINDON.

FIG 112 (P66): FORMAL LAYOUT, ENDEAVOUR WAY, SWINDON.

FIG 113 (P67): ORDERED TERRACES, GODDARD AVENUE, SWINDON.

FIG 114 (P67): ORDERED TERRACES, ACCORDIA, CAMBRIDGE.

FIG 115 (P68): VARIED TERRACES, EAST WICHEL, SWINDON.

FIG 116 (P68): LONDON, (MG).

FIG 117 (P69): LEVEL APPROACH TO FRONT DOOR, NORTH SWINDON.

FIG 118 (P69): SHARED AMENITY SPACE, SPODE CLOSE, NORTH SWINDON.

FIG 119 (P70): DETACHED DWELLING, DUNLEY CLOSE, NORTH SWINDON.

FIG 120 (P70): SEMI-DETACHED DWELLINGS, TADPOLE GARDEN VILLAGE.

FIG 121 (P71): MEWS BUILDINGS, MUIRFIELD WAY, NORTH SWINDON.

**FIG 122** (P71): MEWS BUILDING WITH INTEGRAL PARKING, UPTON, NORTHAMPTION;

© Copyright: Swindon Borough Council

This information is available on the internet at www.swindon.gov.uk It can be produced in a range of languages and formats (such as large print, Braille or other accessible formats) by contacting the Customer Services Department. t: 01793 445500 f: 01793 463982 e: customerservices@swindon.gov.uk FOI 4014/15 ISBN 978-0-9554998-2-1

