



Urban Design Bulletin I Residential Layout and Connectivity

Produced by the Quality Places Practitioners Group (QPPG) on behalf of the Partnership for South Hampshire (PfSH). The QPPG is composed of built environment professionals representing Local Authorities in South Hampshire: Eastleigh, East Hampshire, Fareham, Gosport, Havant, Isle of Wight, New Forest, Portsmouth, Southampton, South Downs National Park, Test Valley, Winchester and Hampshire County Council.

The aim of the QPPG is to promote good quality place making in South Hampshire. To find out more, follow this link:

<https://www.push.gov.uk/work/cultural-creative-industries-and-the-built-environment/>

Introduction to Best Practice

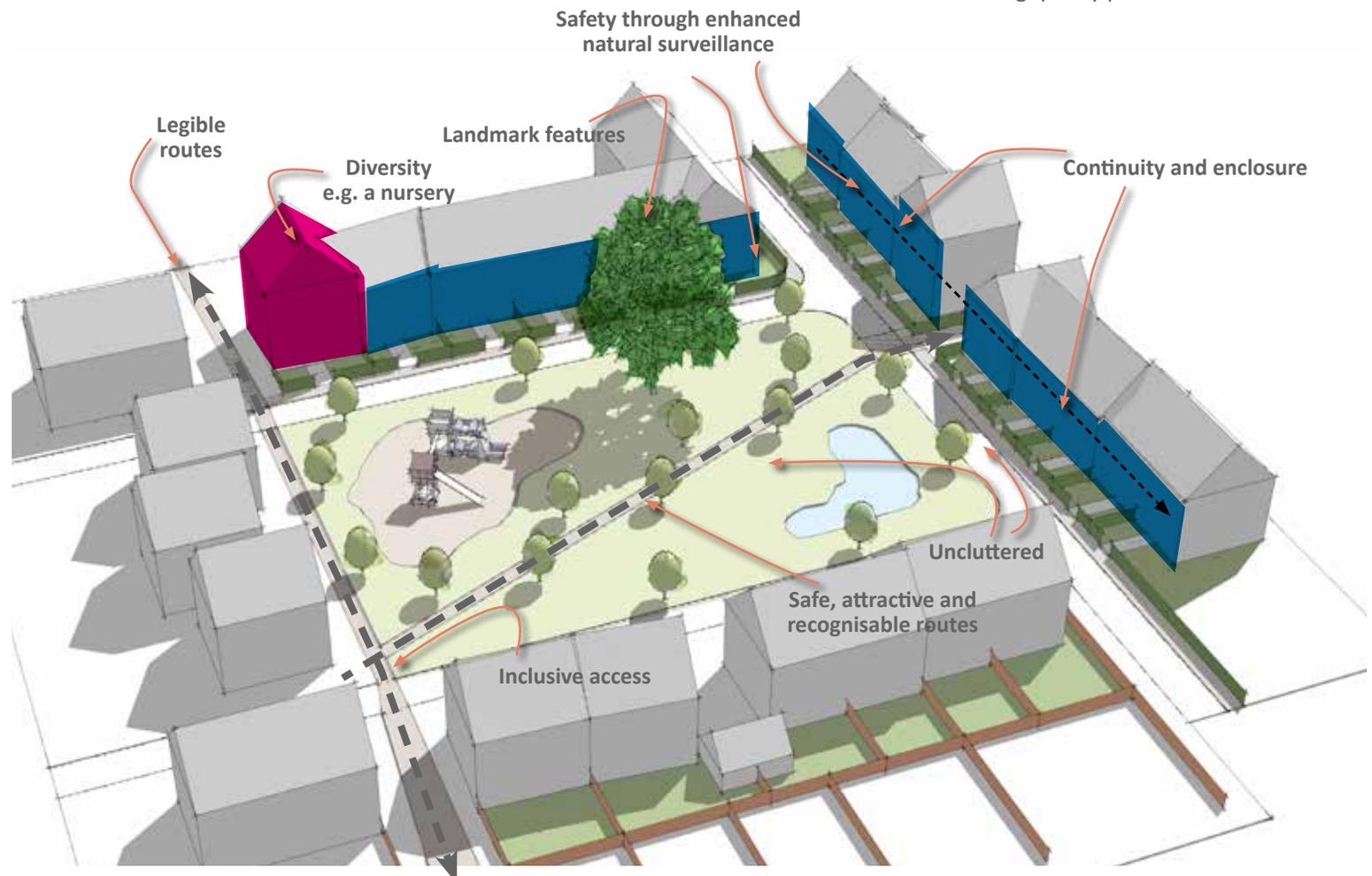
Well-designed places should encompass the following¹:

- » **Character:** townscape and landscape that responds to and reinforces locally distinctive patterns of development, landscape and culture
- » **Continuity and enclosure:** continuity of street frontages and enclosure of space by development, with clearly defined private and public areas
- » **A Network of greenspaces and public places:** attractive public spaces and routes that are comfortable, uncluttered, accessible and inclusive to all, including disabled, elderly, young and vulnerable people
- » **Safe, connected and efficient streets:** locally permeable and well-connected places that are easy to move through, that put people before vehicular traffic and integrate land uses and transport²
- » **Legibility:** recognisable routes, intersections, nodes and landmarks to help people find their way around
- » **Adaptability:** development that can respond to changing social, technological and economic conditions
- » **Diversity:** a mix of compatible uses that work together to create viable places that respond to local needs
- » **Safe places:** where crime is 'designed out' and community safety is enhanced holistically

» **Sustainability:** effective use of natural resources and mitigation against climate change, where the whole-life costs of materials have been considered

» **Cohesive and vibrant neighbourhoods:** places that foster health, wellbeing and a high quality of life, with a mix of uses and good access to cycle infrastructure² and public transport

To ensure places have a sense of identity, developers are advised involve the Local Planning and Highway Authorities at the earliest stages and engage in pre-application discussion. Investing time up-front maximises opportunities for delivering quality places.



Common Issues: Layout

Some examples of common layout issues that lead to lower quality places:

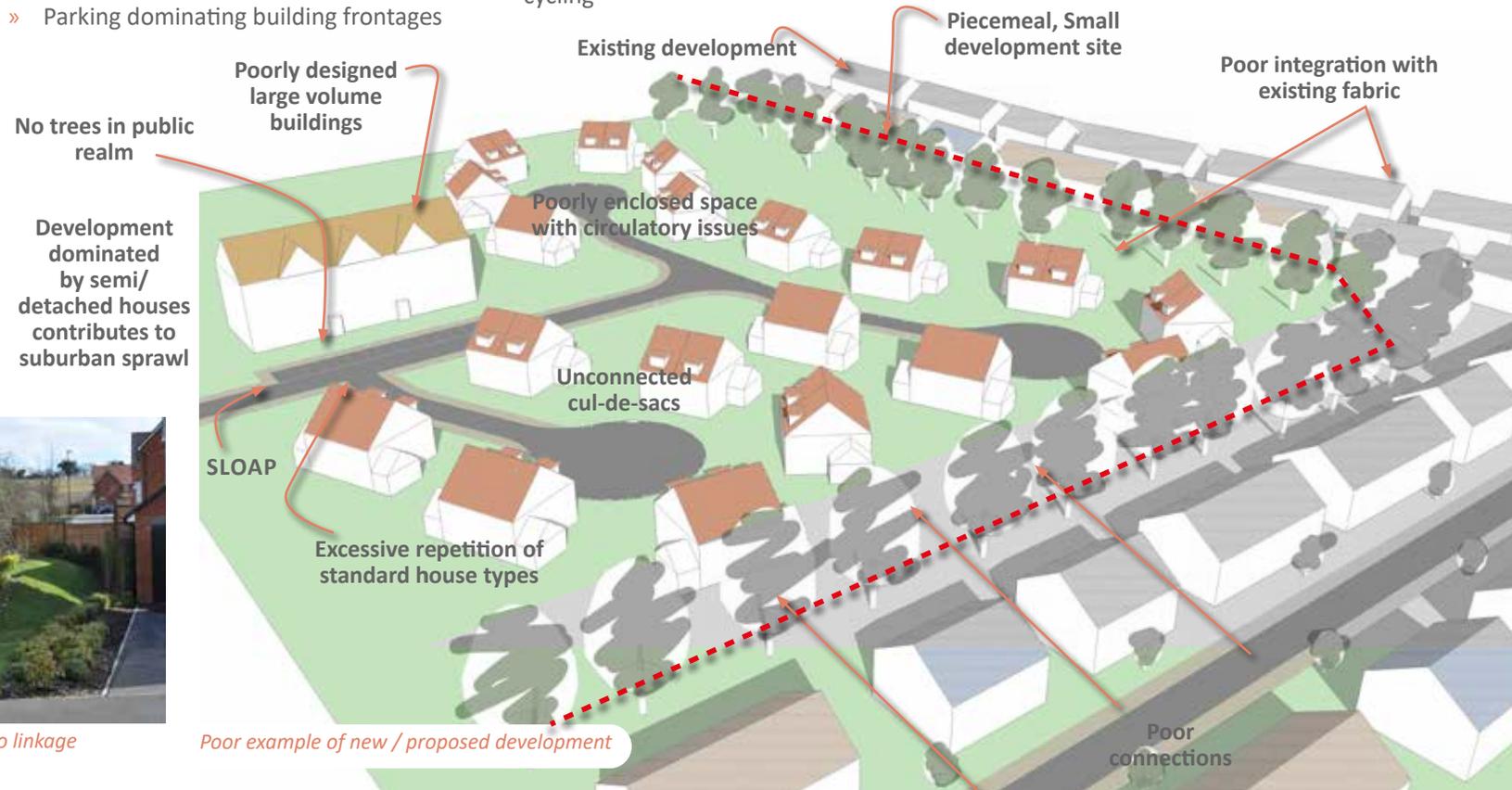
- » Lack of joined-up thinking resulting in isolated, piecemeal developments
- » Failure to integrate new developments with the existing fabric through careful analysis and consideration of local distinctiveness
- » Layout overly influenced by distributor roads and cul-de-sacs, at the cost of permeability and character
- » Overly complex road layouts that are detrimental to legibility and fail to accommodate bus routes
- » Streets designed without consideration of street trees or other soft landscape
- » Dominance of one form of house type that fails to create variety or character
- » Suburban sprawl resulting from uniform low-density building plots
- » Poor replication of traditional architectural styles and inappropriate use on large volume buildings

- » Unnecessary doubling up of circulation creating vehicular-dominated places
- » Space Left Over After Planning ('SLOAP') with no clear purpose or ownership that often becomes unsightly over time
- » 'Dead frontages' caused by long lines of integrated garages, flats over garages, close boarded fences and uses such as large industrial retail units
- » Public and private areas not clearly defined
- » Parking dominating building frontages

- » Bin storage not well considered, resulting in cluttered frontages
- » Over-scaled roads and junctions that are contrary to Manual for Streets, (e.g. wide carriageways, large radii, disproportionately large junction sizes etc.). These create intimidating environments for pedestrians and cyclists
- » NOTE: Roads designed for speeds over 20mph may discourage walking and cycling

Common Issues: Connectivity

- » Poor connections to existing pedestrian and cycle networks, potentially causing greater dependence on cars
- » Lack of filtered permeability to prioritise active travel
- » Breaks in pedestrian and cycle links due to poor detailing of level changes
- » Poor walking routes to public transport links may encourage people to drive



Doubling up of circulation



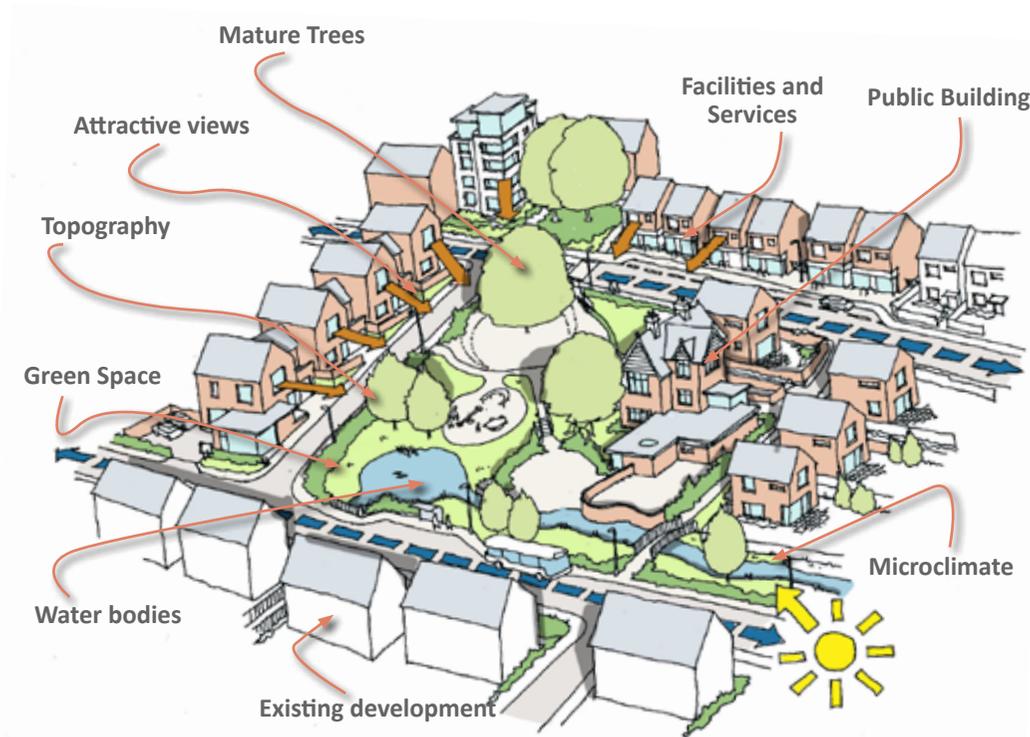
Level change, no linkage

Poor example of new / proposed development

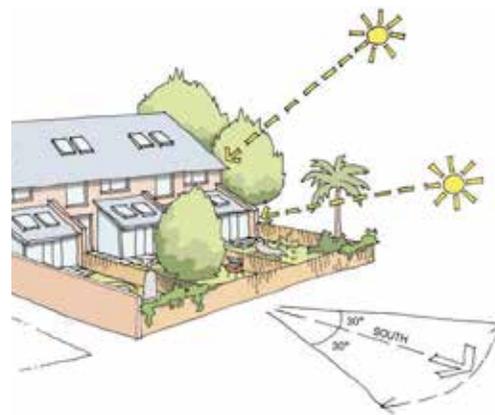
Addressing Issues: Layout

To improve layouts the following actions are recommended:

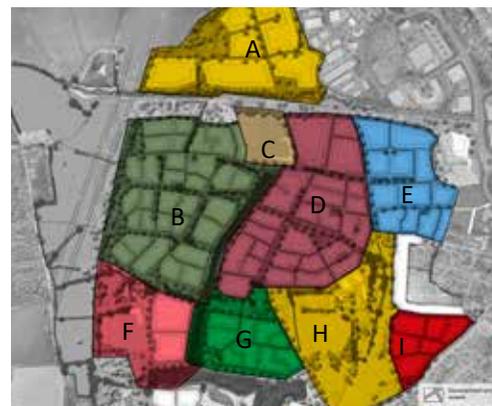
- » Assess the site in relation to its context, and demonstrate an understanding of local distinctiveness to help inform a unique design response^{1,3}
- » Create strong street hierarchies to aid legibility and temper vehicle speed appropriately throughout the scheme
- » Create a user hierarchy that puts pedestrians first and consider that people use space differently depending on their culture, age, level of mobility etc., therefore spaces need to be designed with inclusive access for all^{1,2,3}
- » Create attractive and safe routes to public transport stops and interchanges that are well lit and overlooked
- » Avoid shared cycle/pedestrian routes where possible as this can be intimidating to vulnerable pedestrians: provide dedicated cycling infrastructure where vehicle speeds over 20mph are likely and where cycle and pedestrian numbers are high²
- » Ensure the setting of designated and non-designated heritage assets are preserved or enhanced
- » Utilise topography and orientate development to respond to landform to create cohesive roofscapes unless local distinctiveness dictates otherwise⁴



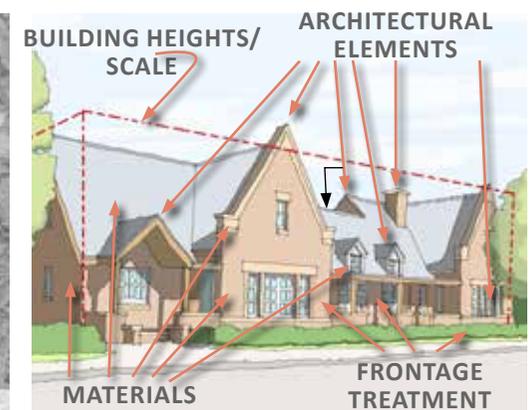
Site characteristics



Passive solar heating



Character Areas identified in plan



Character area vision

- » Follow the grain of good quality existing development to enhance and strengthen local character
- » Maximise solar gain and capture low winter sun by orientating façades with generous fenestration within 30° of due south where practical⁴
- » Retain trees, other landscape and ecological features where appropriate with new planting carefully considered in relation to context⁵
- » Retain high quality built form - buildings, boundary treatments, traditional kerb lines where possible
- » Clearly distinguish private, semi-private, and public space through use of different surface materials fences / walls, soft landscape



Accordia, varying densities



- » Ensure play areas and the routes to them are well overlooked
 - » Character areas can highlight different parts of a scheme and aid legibility through density, materials, activities, open space, land uses and building design, their boundaries should ideally be located along the centre of blocks
 - » Focus higher density around centres / main routes to develop the critical mass needed to support service provision, using a mix of terraces, townhouses and apartments
 - » Emphasise places where people are likely to gather and interact, for example, outside schools, local and district centres, or near parades of shops, with distinctive and well designed buildings and spaces
 - » Place pedestrian, cycle and vehicular networks side by side, only segregate active travel routes where these would be more direct than the road network, or better tie into existing networks
- Addressing Issues: Connectivity**
- » Ensure linkages to existing networks are seamless, introducing filtered permeability where necessary to prioritise active travel, but avoiding pedestrian and cycle route shortcuts that have 'blind corners' and public routes that run along the backs of properties
 - » Provide good active travel access to local public transport services, and ensure waiting areas are attractive and well lit and overlooked
 - » Create permeable development that prioritises pedestrians and cyclists with coherent, direct, safe, comfortable and attractive active travel connections through and between neighbourhoods, but;
 - » Avoid excessively permeable design, for example modernist layouts that feature many pavilion buildings with poorly defined public spaces between
 - » Avoid over-scaled street layouts with generous junction radii and wide carriageways
 - » Extend pavements across junctions and include courtesy crossings to reinforce pedestrian desire lines
 - » Design residential streets with a maximum design speed of 20mph

Parallel Crossing (zebra crossing and cycle crossing). Tight junction radii slow vehicle speeds and support pedestrian desire lines.



References, useful links and further information:

- 1 - [National Design Guide](#), Ministry of Housing, Communities & Local Government, 2019
- 2 - [LTN1/20 - Cycle Infrastructure Design](#), Department for Transport, 2020
- 3 - [Urban Design Compendium](#), English Partnerships, 2000
- 4 - [Quality Places](#), SPD, Eastleigh, Adopted 2011
- 5 - [Landscape Checklist for New Development in Hampshire](#), Hampshire Local Government Landscape Group, 2006

Further Information:

- [Manual for Streets](#), Department for Transport, 2007
- [Building for a Healthy Life](#), Homes England, 2020
- [High Quality Places](#), SPD, Winchester City Council, Adopted 2015
- www.old-maps.co.uk
- [The value of Urban Design](#), CABE, 2001

