

10.0 Uses

- ▶ **Mixed Use Developments**
- ▶ **Gypsy, Roma and Traveller Sites**
- ▶ **Extra Care Housing**
- ▶ **Residential and Nursing Care Homes**
- ▶ **Educational Establishments**



10.0

Uses

Mixed and integrated.

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10.1 Introduction

- 10.1.1 Sustainable places include a mix of uses that support everyday activities. A mix of uses can create different types of activity within streets and places and contribute to the vitality and sustainability of towns and neighbourhoods by providing employment, leisure, social and cultural opportunities to the local area.
- 10.1.2 This section of the Design Guide provides guidance on designing for a mix of uses in town centre locations and within larger scale new developments, and Gypsy, Roma, and Travellers. It also provides specific guidance on the following types of uses:
- ▶ Infill Development (see Built Form)
 - ▶ Larger footprint buildings (see Built Form)
 - ▶ Extra care and nursing and residential homes (See Homes and Buildings)
 - ▶ Self and custom build (See Homes and Buildings)
- 10.1.3 This section should be read in conjunction with chapters 2, 7, 8, 9, 11, 12 and 16 of the [NPPF](#), the adopted [Local Plan](#) (policies, R1, R2, R3, T3, HQ1, HQ3, HQ7, HQ8, HQ9, HQ11, DC1, EE2, EE3 and EE4) and in association with the [National Design Guide](#), in particular sections U1, U2 and U3.
- 10.1.4 Other key documents and resources that should be referenced include:
- ▶ [Manual for Streets](#), Department for transport (DfT)
 - ▶ [Manual for Streets 2](#), Department for Transport (DfT)
 - ▶ [Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning: 3](#) (2nd Edition), Historic England 2017
 - ▶ [CBC Parking Standards for New developments SPD](#)
 - ▶ [The 20-Minute Neighbourhood - Town and Country Planning Association \(tcpa.org.uk\)](#)

10.2 Mixed Use Developments

- 10.2.1 The more mixed the land use, the more reasons there are to visit a space, increasing footfall and the sense of safety and vibrancy. Places with mixed land uses may help to minimise the number and length of trips, creating a positive sustainability impact, even if active travel modes are not used to reach the destination. A range of uses can also create different types of activity within streets and places and contribute to the vitality and sustainability of towns and neighbourhoods by providing employment, leisure, social and cultural opportunities to the local area.
- 10.2.2 The performance and vitality of town centres, high streets and mixed-use developments is a visible indicator of how well a local economy is doing. They are recognised as important hubs of social interaction and cohesion, as well as providers of local jobs and services.

- 10.2.3 Town centres should include a mix of uses including residential, retail, commercial and leisure uses and should be social places that make creative use of public spaces to support a vibrant daytime and night-time economy. Overall, town centre sites should perform as highly sustainable locations, with direct access to a wide range of facilities within easy walking distance and good accessibility to public transport routes and connections. Redevelopment in town centre locations can vary in size, from small scale replacement or re-use of buildings on one or two plots, to larger scale, involving the comprehensive redevelopment of considerable sized parcels of land.
- 10.2.4 Successful communities require a range and variety of local services and community facilities within close proximity, including schools, nurseries, workplaces, healthcare, spiritual, recreational and places to work and meet. Mixed-use development creates active and vibrant places and creates destinations for people. Typically, it is more likely to be found in larger scale developments, but even smaller developments should find ways of providing for other uses to create balanced places or provide easy links to other facilities



Figure 267: We encourage developers to follow the principles outlined in the 20-minute neighbourhood guidance (source: TCPA)

10.2.5 The aim of this section is to provide design guidance to ensure that development results in sustainable, high-quality mixed-use centres. It will also be necessary to consult other relevant sections in this Design Guide to ensure that all the appropriate components of high-quality design are addressed.

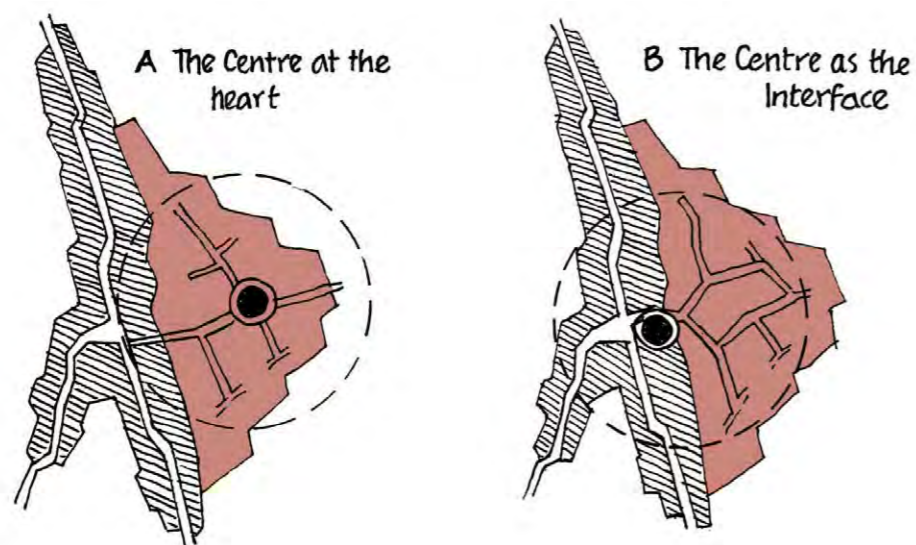


Figure 268: A) Indicative layout of new town centre at the heart of development likely to be less viable. B) Indicative layout of new town centre as the interface is likely to be more viable.

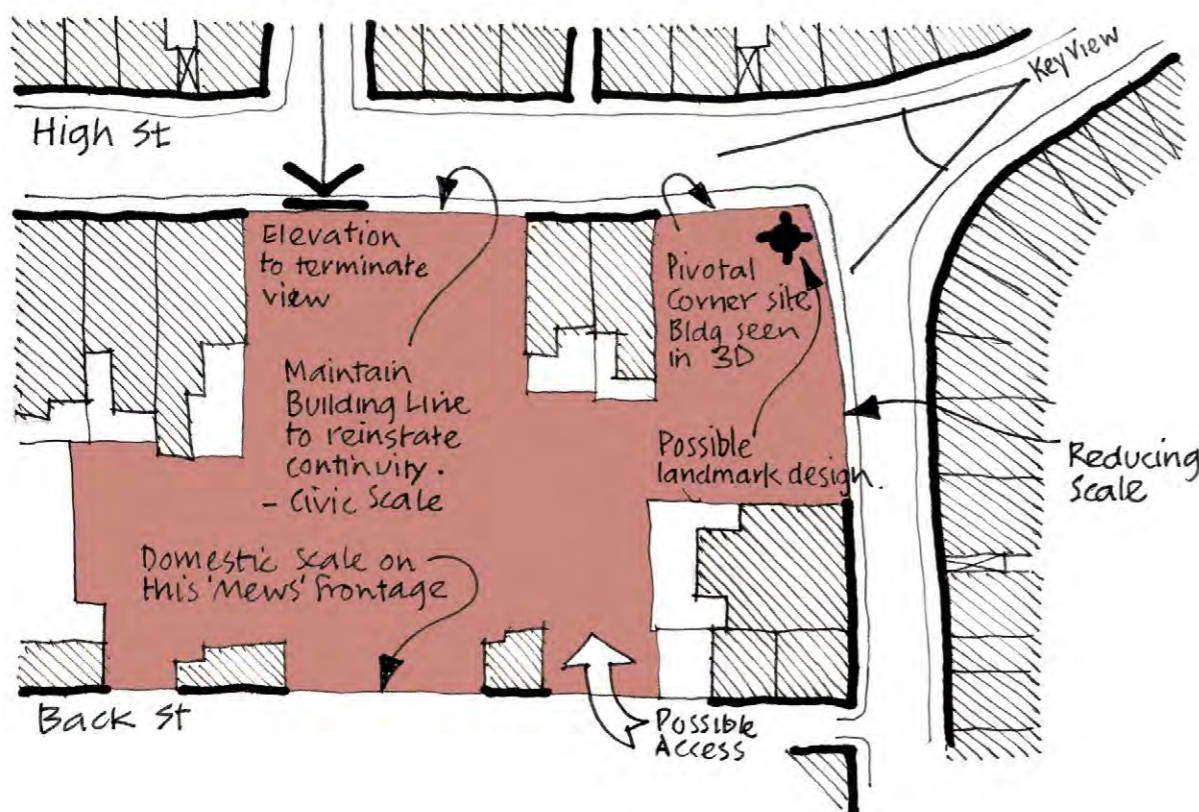


Figure 269: Analysis plan to establish roles of a town infill site

10.3 Design Principles for Mixed Use Developments

- 10.3.1 There is a presumption in favour of developments that contain a mix of uses within buildings and streets where:
 - ▶ The development is located either close to existing services and facilities; or
 - ▶ The development is located on a public transport corridor.
- 10.3.2 Promoting mixed use developments includes adding residential uses to town centres, seeking opportunities for redevelopment of brownfield sites, and repurposing of existing buildings to provide opportunities for mixed uses.
- 10.3.3 In the case of new communities, mixed uses should be integrated into the layout and design of any new scheme from the outset. Schools should be located within the centre of any new community to facilitate sustainable access and the potential use of halls and other facilities for wider use outside of school hours.
- 10.3.4 Proposals for new mixed-use hubs will be supported which can contain uses such as doctors' surgeries, drop-in office space for home working, parcel collection points, cafes, libraries and other community uses.
- 10.3.5 In all developments, mixed uses should be in close proximity to each other, both horizontally within the street and vertically within the same building. This relationship should contribute to the vitality and viability of the centre, by attracting people for different reasons and uses, and to allow people to access different uses in the same location.
- 10.3.6 Ideally town or neighbourhood centres should be located within a 15-minute walking distance of residential development and especially sheltered housing. Centres should be served by sustainable transport modes including public transport and cycle routes.

Residential Density as Part of Mixed Used Developments

- 10.3.7 It is essential that there is a 'critical mass' of population within easy reach of the centre to support the projected range of uses. Therefore, residential development should be integrated into the centre, and design solutions adopted to ensure that these dwellings complement rather than conflict with other uses.
- 10.3.8 Including residential accommodation within a mixed-use development can be attractive to residents who welcome being close to amenities and facilities. Increasing residential density in town centre sites will help to address the issues of falling footfall and is key to improving and maintaining town centre vitality and other uses. However, these changes of building usage present additional challenges in terms of designing out night-time disturbance, and the impact of vehicular servicing and designing for personal safety, which needs to be considered at the planning and design stage.

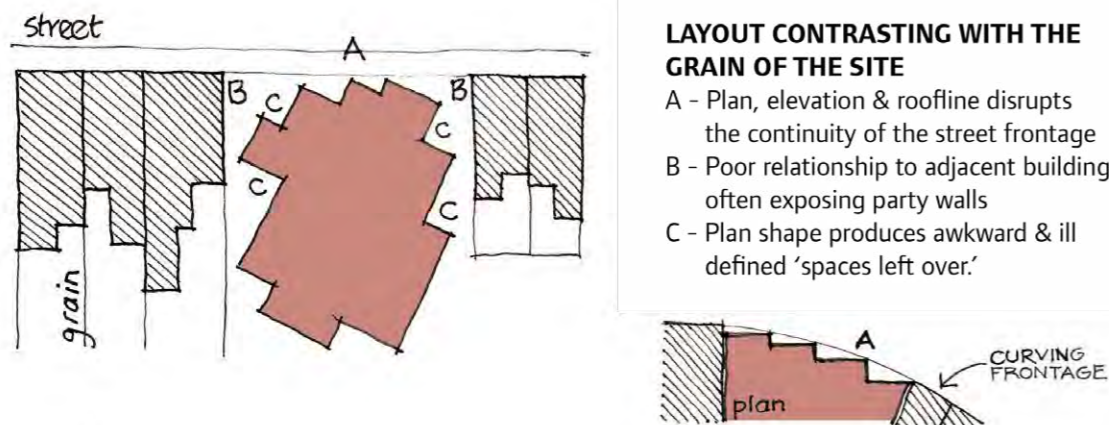
Mixed Use - Designing to Complement Uses and Designing Out Conflict

- 10.3.9 When designing new development in a mixed-use centre or high street location, it is important to consider 'future proofing' of the proposals. This will require careful thought on designing buildings which are capable of conversion to other uses at a later date. Floor space, internal layout, floor to ceiling heights, and scope for enabling independent access to upper floors should be considered.

10.3.10 The extent and range of uses will depend on the needs and demands identified in the Context Appraisal (see the Context and Identity chapter), together with the Council's regeneration strategies or employment policies. In this regard, the Context Appraisal will add local detail to these policies and identify the opportunities for bringing about new employment, community space and service infrastructure.

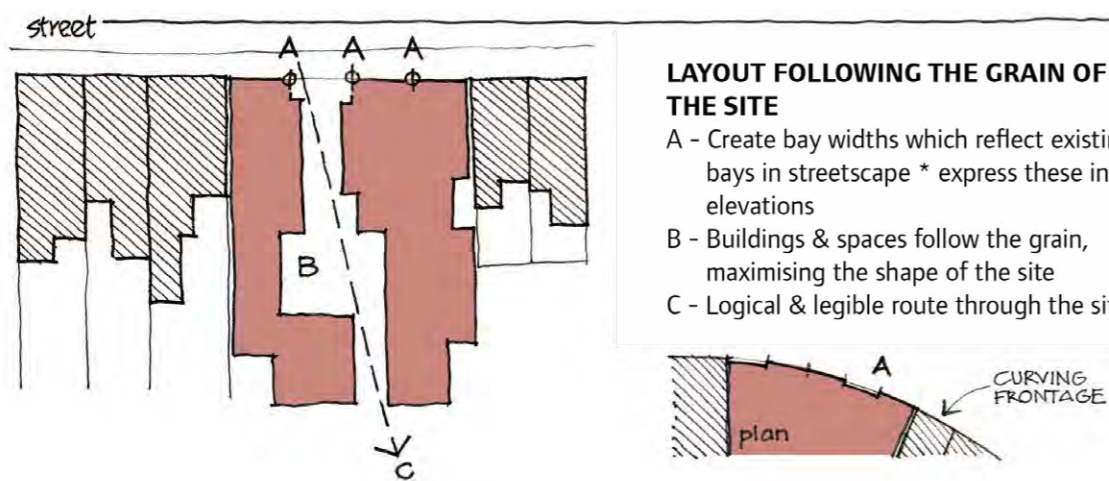
10.3.11 Retail and office uses are generally only active during the day, which if not part of mixed-use developments can mean that long periods of inactivity lead to a lack of surveillance and reduced safety and security. Adding residential uses above shops, bars and restaurants can ensure that buildings and developments have activity throughout the day.

10.3.12 It is essential that active frontages are incorporated into the design of all elevations facing the public realm. It will be expected that entrances, windows to residential habitable rooms, office windows and shopfronts will be provided on main elevations that follow the key pedestrian desire lines and, to a lesser extent, to flank walls. Active frontages help to maintain commercial continuity in shopping streets and provide passive surveillance and visual interest. Blank walls will not be acceptable on street frontages.



LAYOUT CONTRASTING WITH THE GRAIN OF THE SITE
 A - Plan, elevation & roofline disrupts the continuity of the street frontage
 B - Poor relationship to adjacent buildings: often exposing party walls
 C - Plan shape produces awkward & ill defined 'spaces left over.'

Figure 270: Inappropriate building layout



LAYOUT FOLLOWING THE GRAIN OF THE SITE
 A - Create bay widths which reflect existing bays in streetscape * express these in elevations
 B - Buildings & spaces follow the grain, maximising the shape of the site
 C - Logical & legible route through the site

Figure 271: Acceptable building layout

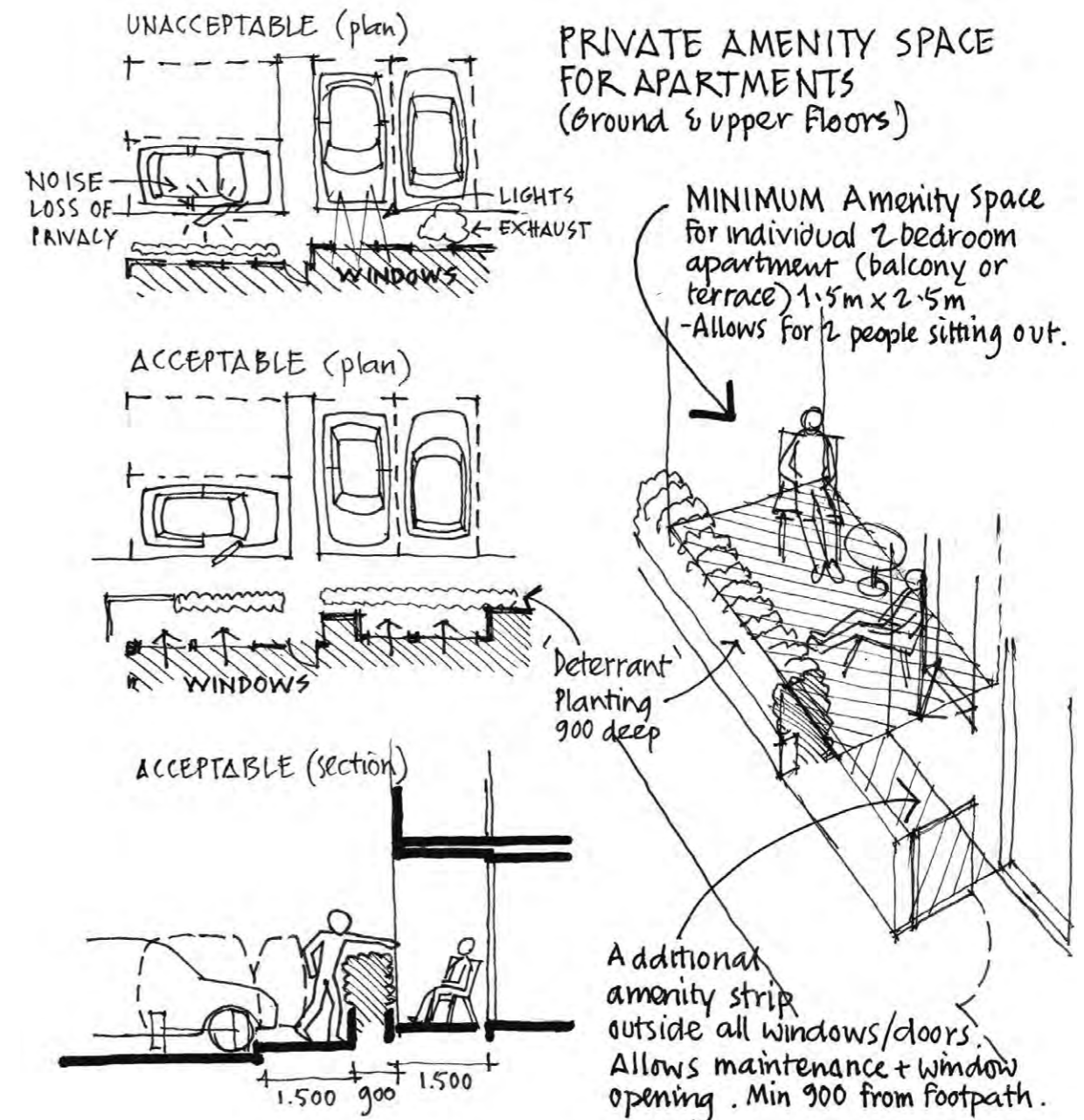


Figure 272: Private Amenity Space for Apartments

10.3.13 Pedestrian and vehicle permeability should be encouraged through mixed use developments as this will increase the chance of greater activity and encourage footfall. The appropriateness, desirability, and convenience of providing pedestrian permeability through the development will need to be balanced with considerations of privacy, safety, and possible sources of nuisance. Main residential amenity spaces to the rear of urban blocks will ensure that an appropriate level of privacy is maintained, and this will also allow these spaces to be quiet. High levels of natural surveillance and lighting at certain points will be necessary.

10.3.14 Care should be taken to design for means of escape in case of a fire to enable useable retail units and street entrances for residential use while avoiding long access corridors above. Access by individual stair cores across residential courtyards above large retail units can be a workable solution to this issue.

10.3.15 All public entrances to dwellings and other uses should be designed to be accessible to Building Regulations Part M. There are additional standards for residential uses (see Chapter 11: Homes and Buildings) that must also be taken into consideration.

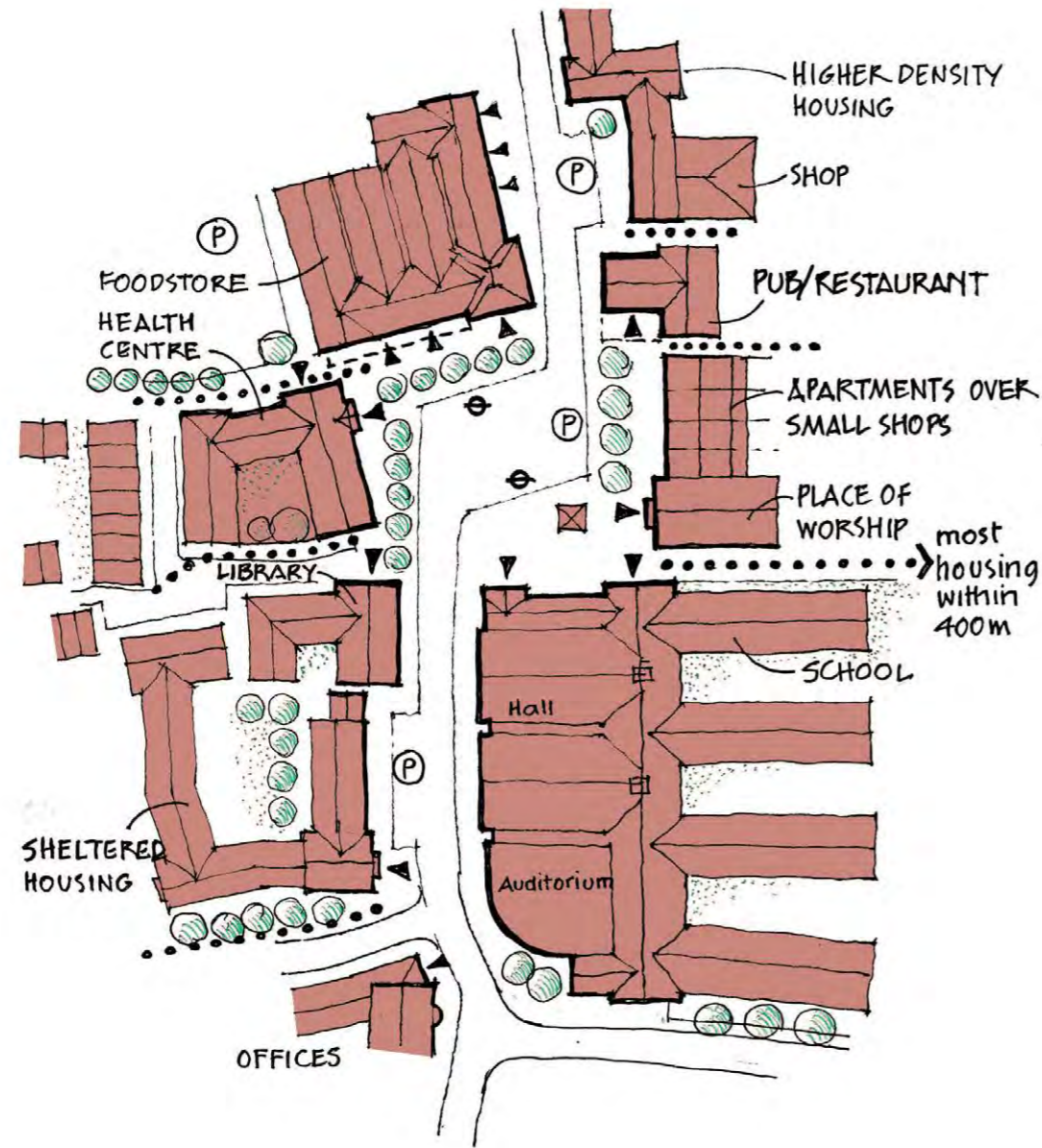


Figure 273: Indicative layout of town centre development showing possible mix of uses

10.3.16 Care should be taken to ensure that uses can be compatible and that the potential for incompatibility is designed out. The types of uses and block design will require careful consideration to minimise the possibility of conflict. Access arrangements, noise generation and safety issues must be satisfactorily addressed.

10.3.17 While habitable room windows and balconies open to the town centre streets are encouraged to provide more overlooking and activity out of retail hours to improve safety, it is important to also ensure that private open space is provided away from potential noise sources such as pubs and restaurants, and particularly away from servicing. Deliveries and servicing of retail and commercial use within or next to residential development will need to be sensitively dealt with so that these activities are adequately separated and do not occur during unsociable hours.

Amenity

10.3.18 A raised courtyard deck can be a useful way to separate residential and office amenity spaces from conflicting uses. This allows for servicing, retail, and restaurant uses below, with a landscaped courtyard above. Residential entrances can be located where convenient at street level and access across the courtyard can be utilised to access groups of apartments either side of stairs so that the residential accommodation is arranged around the perimeter of a landscaped space. It is important to allow enough depth between the ground and first floors for meaningful landscaping. This depth for a landscape zone in the courtyard can also be utilised as a service zone between ground floor uses and residential upper floor uses.

10.3.19 Where a potential clash of uses in terms of acoustics is unavoidable, acoustic measures should be taken to protect residential amenity such as triple glazing, additional sliding glazing to enclose balconies and whole house ventilation to guarantee ventilation to dwellings. Rules regarding hours of servicing can also be implemented so that the extent of conflict issue can be reduced. BS8233 (2014) "Guidance on sound insulation and noise reduction for buildings" is the British Standard regularly referred to by Local Authority planning departments to ensure that residents of proposed new build or refurbished developments have adequate noise insulation and are suitably protected from noise outside.

10.3.20 The existing buildings and spaces, urban grain, plot widths and other building subdivisions should influence the width of the proposed development. This is particularly important in a street of continuous frontages, in order to maintain the scale and vertical emphasis of the street elevation (see Chapter 6: Built Form).



Figure 274: (left) Accessible entrance to Grove Theatre Dunstable, part of a Mixed- Use Development
Figure 275: (right) Accessible Entrance to Houghton Regis Hub, Bedford Square

10.3.21 It is important that dwellings above other uses have adequate amenity space with individual balconies being provided at a minimum of 1.5 metres in depth and at 5 square metres in area. The opportunity for additional shared residential amenity to the rear should also be explored, as balconies are unlikely to provide sufficient amenity space on their own.

**LIVING OVER THE SHOP
APARTMENT LAYOUT OPTIONS**

DUAL ASPECT APARTMENT

- Allows natural through ventilations
- Allows for private side/public side layout
- Ensures sunny aspect at a variety of orientations
- Allows for choice of room layout
- Possible limitations on stair positions/ shop frontage

SINGLE ASPECT APARTMENT

- Could be used on slightly deeper plan layout
- Possibly fewer stair access points/ wider shop fronts
- Some apartments could have limited sunlight
- Single outlook (may be limited)
- Fewer opportunities for natural ventilation

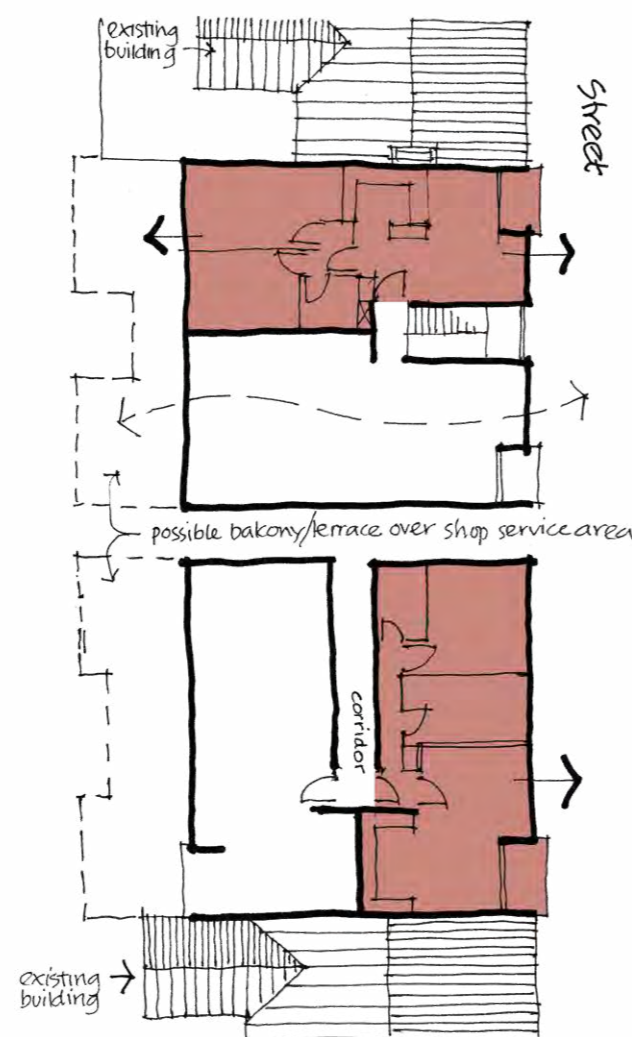


Figure 276: Apartment layout options

Large stores

- 10.3.22 Where large food stores are integrated into town centres, care needs to be taken to ensure that they do not offer inactive and blank facades onto the key areas of public realm. In some scenarios large stores may be more appropriate as a backland magnet store. Incorporating residential courtyards above such stores will help in providing active frontage and producing an appropriate rhythm and proportion to the elevations.
- 10.3.23 Where large retail stores are proposed as backland development, the store entrance should be located on the main pedestrian route in the most accessible location. Where sides of a food store face onto areas of public realm, these facades can be enlivened through small single aspect units that ‘wrap’ the side of the food store and provide an active frontage onto the public realm.

Service areas

- 10.3.24 Residential habitable rooms should not be located adjacent to service areas where possible. There should be a clear separation between retail servicing and residential use. The residential use will require their own refuse, recycling, and cycle stores. Service areas, such as collection areas for recycling material (for residential, retail, and other uses), will require dedicated areas which are convenient for collection, be relatively unobtrusive and situated where they cause the least disturbance to residents and shoppers. Service areas should therefore be located in areas separate from public use and away from residential private amenity areas. This could be on the least used street in terms of public access but would preferably be in the centre of an urban block, vertically separate from any residential amenity.
- 10.3.25 A separate refuse store will be required for commercial and residential uses. Commercial waste is normally collected by a private waste management company and residential waste is collected by the Local Authority. The design must include suitable turning facilities for service vehicles. Refuse store areas should not be designed as a separate facility to cycle stores. A Waste Audit will be required and should give detailed information on these points.

Town Centres and Historic Context

- 10.3.26 Many of Central Bedfordshire’s town centres are within Conservation Areas and include Listed Buildings and non-designated heritage assets. These considerations will have a major influence on layout, massing, and design. Reference should be made to the heritage guidance in the Context and Identity chapter.



Figure 277: Leighton Buzzard Town Centre is a Historic Conservation Area

Economic Considerations

10.3.27 Economic considerations regarding the size, shape, location, height, and servicing requirements may conflict with the established scale and grain of the site and the adjoining properties. However, these considerations should not overly influence the quality of the design being delivered. Decisions will have to be made between the qualities of the existing buildings and street scene, and the requirements and mix of uses within the proposed development. Some elements may be fixed, whereas there may be opportunities for negotiation for other elements of the scheme.

Ownership

10.3.28 In addition, regard should be had to the Building Regulations and ownership boundaries which are not strictly part of the planning process. The feasibility of assembling sites will depend on ownership, and it is encouraged that landowners collaborate to bring larger sites forward where an opportunity exists to regenerate an area or to provide a new development.

10.3.29 When designing new developments, there is a need to provide a clear distinction between public, shared private, semi-private and private space, so that the ownership is clear in terms of future maintenance. Consideration should be given to how car parking and servicing should be addressed, and whether 'gating' of a development is required. Gating should only be considered in shared private space where general access needs to be restricted for security reasons.

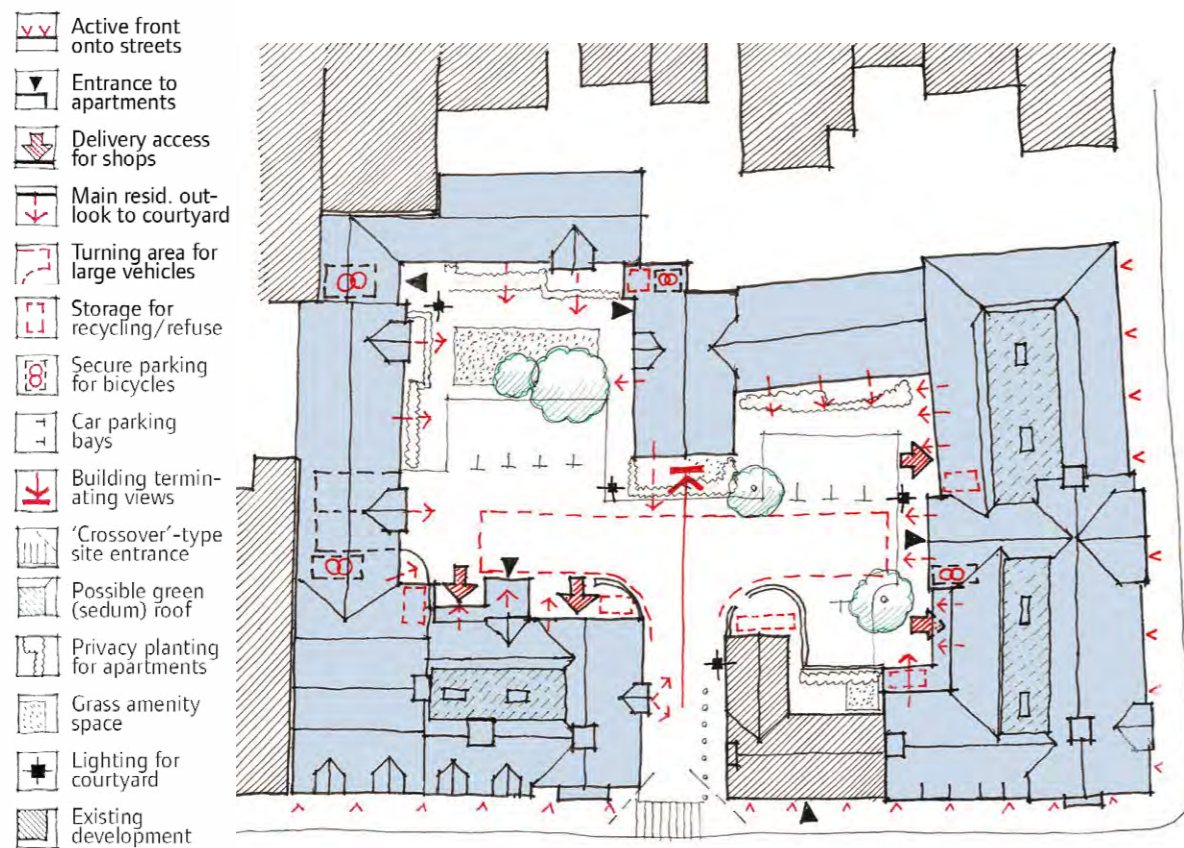


Figure 278: Analysis plan to establish roles of a town infill site

No adverse impact on Townscape or Landscape

Infill site usually under 0.5 ha Most adjacent built form has some 3 storey elements

New Development follows Footprint & massing of existing

BUS Stop within 200m Station within 1km (approx)

Shops & community facilities within approx 400m

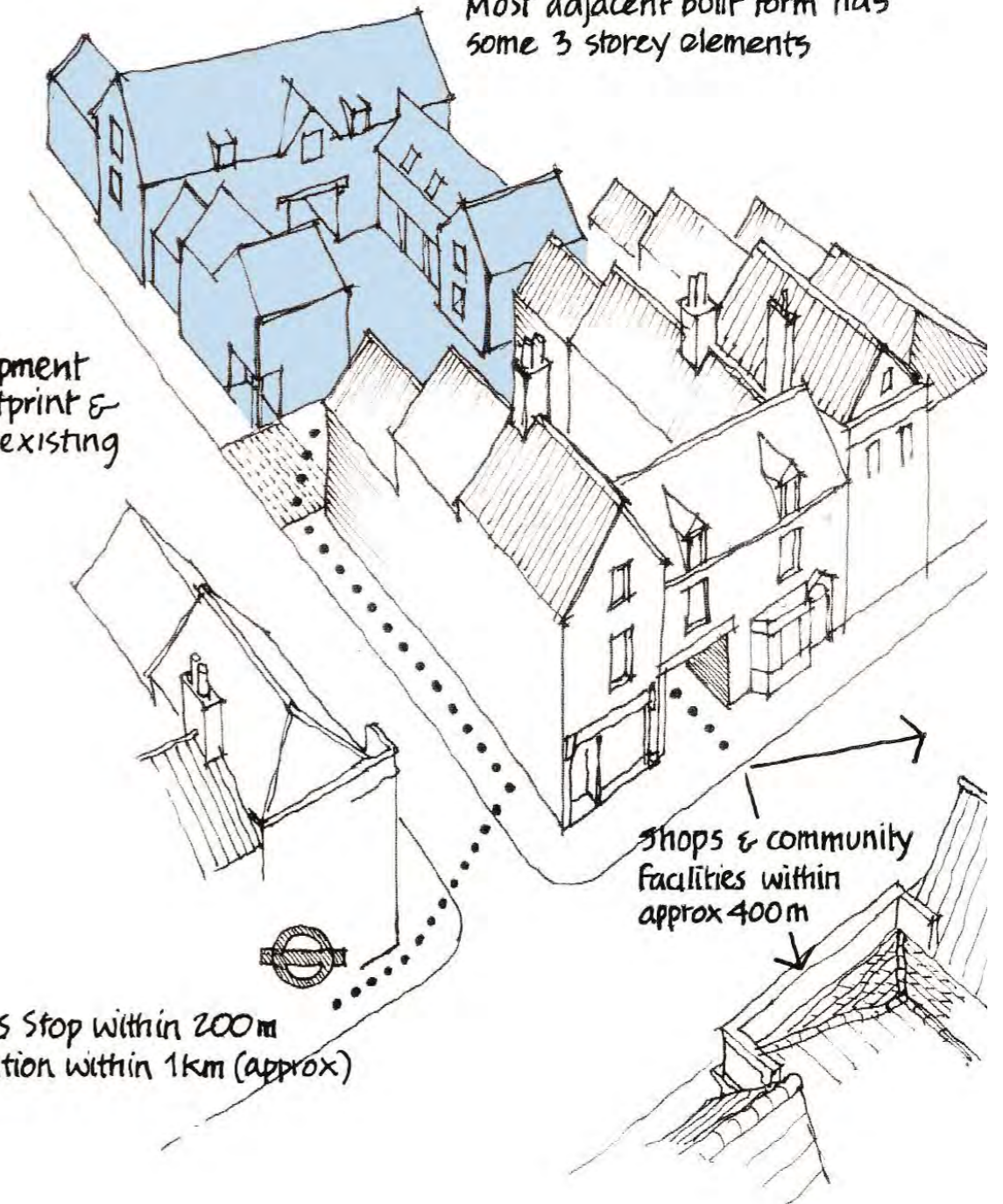


Figure 279: Indicative layout of a town centre development showing possible mix of uses

10.4 Designing Gypsy, Roma and Traveller sites

- 10.4.1 There has been various guidance and recommendations on the design and delivery of Gypsy and Traveller sites over the past 20 years. These have ranged from detailed design guidance through to policy led documents. Currently the only guidance that remains is the Planning Policy for Traveller Sites 2015 (PPTS), which should be read in conjunction with the NPPF.
- 10.4.2 Policies H7 and H8 of the adopted Local Plan set out the requirements for assessing planning applications for Gypsy and Traveller sites and Travelling Showpeople sites and includes criteria which relates to site design and the consideration of the surrounding area. This section of the Design Guide seeks to:
- ▶ Confirm the process for community liaison and engagement;
 - ▶ Promote good quality design;
 - ▶ Promote safe and accessible Gypsy, Traveller and Showpeople sites;
 - ▶ Promote sustainable and healthy communities; and
 - ▶ Consider active design principles.
- 10.4.3 Planning applications for new sites, extensions to existing sites and infilling of sites will be assessed against national planning policy and the relevant Local Plan policies. Consideration should also be given to this design guidance.
- 10.4.4 There is no single, appropriate design for sites, any more than there is for general housing development. Early and regular consultation with prospective residents is crucial in getting the design right for any new site, considering the needs of residents and the physical characteristics of the site itself.
- 10.4.5 To assist those making planning applications for Gypsy and Traveller sites, the following advice has been prepared. There are several matters which need to be addressed within planning application documentation to ensure that Gypsy and Traveller sites are developed to the same standard as conventional bricks and mortar housing. Planning applications must therefore include details of the following criteria.

Layout of the site

- 10.4.6 Consideration should be given to the location of the site and its surrounding context, in informing the overall design.
- 10.4.7 Public rights of way should not run through sites and should not be situated adjacent to the boundaries of such sites. Where new sites are identified, any existing public rights of way should be diverted to an appropriate route that benefits users before the site comes into operation.
- 10.4.8 The layout of a site will be largely dependent on the group which intends to live on the site. Traditional linear pitches arranged around a central spine road are acceptable, or circular or horseshoe arrangements may be acceptable depending upon the size, shape, and topography of sites. The site should consider the surrounding context such as privacy and be safe from traffic movements.

- 10.4.9 The layout of the site must show the location of all individual pitches and access arrangements and where appropriate any communal recreation area or children's play area, communal dustbin waste areas/collection points and communal dayroom, amenity, or shower/toilet facilities. The provision of a play space should be considered early in the site layout rather than allocating the "left-over" space for recreation. The play area should be located in a position which can be supervised but is also safe from traffic movements.
- 10.4.10 Site plans must also show landscaping and tree planting within or around the site and any areas that may be provided for wildlife or biodiversity net gain, or as paddock space for any animals. Sites which are only tarmac, paving or hardstanding may not be considered acceptable, including with regard to the provision of adequate surface water drainage and biodiversity.
- 10.4.11 Consideration should also be given for the foul drainage of the site, where possible. If connection to a main sewer is not possible then a collective package sewage treatment plant may be possible for example, and this would need to be located appropriately.

Individual Pitches

- 10.4.12 There is no definition of the size of a pitch however a family pitch should be large enough to accommodate an amenity building, a large trailer (mobile home/static caravan), touring caravan, parking for two vehicles, drying space for clothes, shed for bicycles, tools etc and personal outside area as appropriate for the family circumstances. Some extended family pitches may incorporate several static caravans and tourer caravans and communal amenity facilities as appropriate. All the above requirements to be provided within the size of pitch proposed.
- 10.4.13 Each individual pitch should have an adequate and appropriate size to accommodate all the requirements for spacing of the caravans and other structures and uses such as to meet the Council Model Standards for Licencing purposes. In order to meet Fire Regulations for example, all caravans must be at least six metres apart from other caravans or structures and at least three metres off boundaries or two metres back from access roads.
- 10.4.14 Designs should consider suitable locations for Fire Hydrants in consultation with the Bedfordshire Fire Authority, or where water pressure or location away from mains does not allow this, then caravan sprinkler systems or appropriate alternative would be required. Where touring caravans are intended to be used for independent residential purposes on the pitch there will need to be provision of an appropriate amenity building. Dayrooms may also need to be provided within the pitch, particularly where static caravans are smaller or there are several static caravans on the pitch.
- 10.4.15 Buildings would normally only be of a size of up to 50 square metres external space to meet Model Standards, otherwise planning permission would be required. A suitable private personal amenity area should also be provided. This can be located to the front of the pitch or could be made more private by locating it to the rear of the pitch. Different surfacing could be used to improve the appearance of the pitch, for example tarmac, block paving, gravel, grass etc. Planning application documents should show that it is possible for all the above requirements to be provided within the size of pitch proposed.
- 10.4.16 There should not be any provision for the carrying out of any commercial activities or storage of associated commercial materials on sites as such activities would not normally be permitted on Gypsy and Traveller sites. The parking of small commercial vehicles for the carrying out of businesses off-site would be acceptable and should be accommodated within proposed layouts.

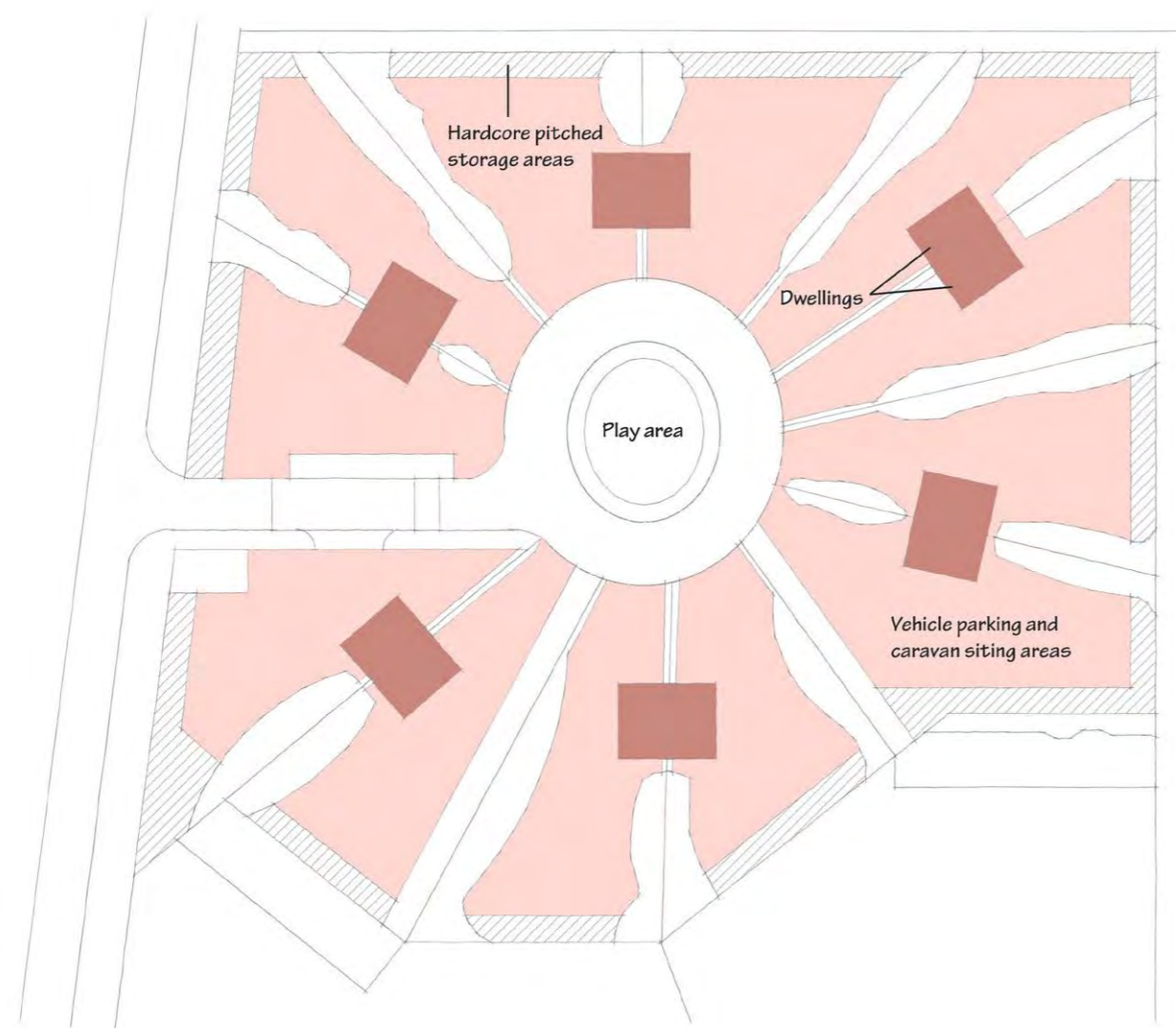


Figure 280: An example of a Gypsy and Traveller site layout.

Boundary treatment

- 10.4.17 Brick walls, timber fencing, ornamental railings, hedges, or other landscaping could be used, although hedging or other landscaping would be most appropriate in rural areas. Details of how the boundary of the site will be marked need to be provided. Site boundary treatments shall not encroach on to the public highway and shall be placed clear of any visibility splay. The boundary should provide a clear edge to the site and take account of adjoining land uses and the safety of children. Details of the type of boundary treatments which would be used between plots need to be provided. The boundary should provide privacy for neighbouring pitches.

Access and Parking

- 10.4.18 Access to the site and to individual pitches must be wide enough to allow for the manoeuvring of vehicles and caravans. Access from the Highway should provide the appropriate visibility sight lines for the speed of road, the visibility splays being within the control of the site owners. Any gates securing the access to the site should be set back at least 12 metres from the edge of the highway to enable vehicles to pull clear of the highway whilst waiting for the gates to open.
- 10.4.19 Where the access road into a site is of a considerable length then the provision of passing spaces should be made where possible and a refuse collection point provided at the highway entrance, outside of any visibility splays. There may also need to be a safe point provided at the site entrance for collection and dropping off school children.
- 10.4.20 Parking for cars and vans other small commercial vehicles should be accommodated within each pitch, however where appropriate visitor car parking and passing bays could be provided.
- 10.4.21 Parking of HGV lorries over 3.5 tonnes would not normally be permitted on sites and any application for a Vehicle Operators Licence for such vehicles would likely be objected to.

Utilities and Drainage

- 10.4.22 Planning application documents must show details of the foul and surface water for the site. Sites should connect to the mains sewer wherever possible. Where it is not possible for the site to connect to the mains sewer evidence must be shown that this is the case and details of an alternative solution provided. The Environment Agency hierarchy of the alternative provision would be a Package Sewage Treatment Plant, Septic Tank, or lastly a cess pool.
- 10.4.23 The provision should meet the relevant Building Regulation Approved Document H Standards (or as amended) and in particular demonstrate the capacity of the provision to be adequate for the expected numbers of persons living on the site. Details of surface water disposal must be provided; this could be achieved by soakaway or SUDS.
- 10.4.24 Any development within a flood zone would not normally be acceptable and a Flood Risk Assessment would be required. Any development site including areas within Drainage Board Byelaw areas, usually 9 metres from top of the water course bank, must be able to demonstrate that requirements can be met, and this would normally exclude any development, including tree and shrub planting.
- 10.4.25 Sites must be serviced by water and electricity and evidence that this is possible provided within an application for a new site. Details of the lighting and any proposed CCTV which would be installed on the site should also be provided.
- 10.4.26 Details of provision for waste disposal should be provided and clearly shown on the layout. The required litrage capacity of bins or containers should be checked with the relevant Council Team but would not normally include separated types of collection. The refuse disposal would normally include on pitch provision and an adequately sized communal bins area and/or collection point sited at the entrance to the site from the adopted highway.

Health and Wellbeing

- 10.4.27 Everyone should be able to live in a community that is safe, healthy and provides opportunities, whether that home is a house, a flat or mobile home. Health and wellbeing play a large part in the success of development no matter the size, location, or use. Integrating health and wellbeing principles can be through the physical design as well as provision and management of sites. Considerations should include:
- ▶ Promoting high quality design through environmental sustainability;
 - ▶ Providing convenient local healthcare services;
 - ▶ Providing interesting and stimulating open spaces and natural environments;
 - ▶ Promote independent living;
 - ▶ Promoting access to healthy and locally sourced food;
 - ▶ Encouraging active travel, most particularly cycling and walking;
 - ▶ Creating safe and accessible environments.
- 10.4.28 When designing the layout of a site, careful consideration must be given to the health and safety of all residents, given the likelihood of a high density of people on a site and relatively high levels of vehicle ownership amongst some groups of Gypsies and Travellers.
- 10.4.29 The design must cater for all abilities by ensuring accessible access across a development is provided. This is to ensure that all design is compliant with Building Regulations Part M.
- 10.4.30 For vehicle access, it is recommended that clear and effective signage are introduced where speed restriction or other traffic calming measure are applied. It is also recommended that appropriate traffic calming measures are considered for all sites. Similarly, clear directions should be in place to indicate the location of hydrants and other access points for the fire service etc when attending an emergency on site. The need for separate vehicular/ pedestrian site access should be considered. It is important that consultation with local fire and rescue services are undertaken at an early stage.
- 10.4.31 Many security issues can be addressed at an early stage avoiding a sense of isolation amongst Gypsy and Traveller communities. An approach to designing out crime and social exclusions should be a priority when assessing development and layout. Designing in community safety and social inclusion through openness of design should be promoted at all design and planning stages. Site design should maximise natural surveillance enabling residents to have clear views of access and open space.
- 10.4.32 These can be reviewed in in partnership with the Bedfordshire Police, Designing Out Crime team. Public communal spaces and private pitches should be clearly defined. Defined boundaries should be included where this aids in avoiding vandalism, fly tipping and unauthorised caravans. Consultation should be undertaken on the level of security provided on a site. For example, lockable gates where control can be had over access can reduce unauthorised parking and caravans being pitched.

Play

- 10.4.33 Communal areas for children should be included where possible. The provision of play should be provided where suitable provision is not available within walking distance on a safe walkable route or by using public transport. Play spaces should be designed for all ages and families and children should be consulted to ensure the provided equipment is best used. The siting of play spaces should be within a central location allowing natural supervision.

10.5 Travelling Showpeople

- 10.5.1 The requirements for Travelling Showpeople sites are similar in terms of the overall principles of good design, however, some aspects are unique. For example, with the layout it is important to give recognition of the mixed nature of the use with separated areas for storage and maintenance of commercial equipment and vehicles; and residential areas to allow for static homes of permanent occupiers to be separated, if necessary, from seasonal occupiers and area set aside for stationing of tourer caravans only used on the road and not occupied on the permanent site. Therefore, consideration should be given at an early stage as to how all the various elements that are required on a site will be incorporated to give an environment which is suitable and appropriate for the intended use.

10.6 Extra Care Housing

- 10.6.1 Extra care housing is about providing flexible and attractive homes for individuals which can meet their aspirations as well as their needs; and is not about providing a further form of institutional care. Extra care housing comes in a variety of forms, and it may be described as sheltered housing, housing with care or retirement communities. Occupants may be owners, part owners or tenants.

Key Considerations

- 10.6.2 The design principles applied for other types of residential accommodation should be applied to extra care schemes but those below are specifically relevant.
- 10.6.3 Extra care schemes should:
- ▶ Be centrally located with good access to services and facilities
 - ▶ Adopt progressive privacy principles
 - ▶ Carefully consider the placement and use of communal areas to aid social interaction
 - ▶ Consider the provision of a community hub to aid integration with the wider community
 - ▶ Maximise natural light and provide high quality artificial lighting
 - ▶ Minimise unwanted solar gains - elderly are more vulnerable to high temperatures
 - ▶ Provide general flexibility of space and 'care ready design'
 - ▶ Use quality landscaping to enhance outside space
 - ▶ Incorporate accessible design for visual, hearing, cognitive and mobility impairment
 - ▶ Consider the use of new assistive technology e.g., movement detection and telecare systems
 - ▶ Strive to be domestic in style.

Location

- 10.6.4 Location is of considerable importance in the development of extra care housing and can mean the difference between a scheme and its residents being part of an external community or remaining segregated and isolated. In some areas there is a tendency to perceive specialist housing for older people as not needing to be in densely populated areas. However, where a scheme is located may influence the degree of community involvement, it may limit its attractiveness to staff to work in if it is inaccessible, and it may discourage relatives or friends from visiting.

Size

- 10.6.5 There is considerable variety in the size and design of extra care housing schemes, ranging from the very small (6 – 12 properties) to the very large retirement villages (300 plus properties) There will always be a tension between the greater efficiencies of larger schemes and the desire to develop a scheme on a domestic scale which is attractive to live in.

Grouping of Flats

- 10.6.6 The majority of completed Extra Care schemes have been designed with central communal facilities serving all residents. A number, however, have been developed on the principle of 'clusters or friendship groups, with 8 or 10 flats having an individual lounge and dining room (and possibly an assisted bathroom).
- 10.6.7 Consideration needs to be given at the very earliest stage of the design process to whether such an arrangement is appropriate, and to whether the individual clusters are to cater for specific needs. In many cases a mix of sizes will be desirable as the larger ones will be suitable for those with limited care needs and the smaller ones for those with moderate to severe dementia.
- 10.6.8 Other key considerations:

Accessibility

- ▶ Is it easy to walk on and off the scheme?
- ▶ Are the surrounding areas wheelchair accessible?

Local Services

- ▶ Is there safe level access to community facilities, including shops, leisure facilities and health centres etc?
- ▶ Is there access to local public transport services?

Social Inclusion

- ▶ Is the scheme likely to attract local people?
- ▶ Is its location likely to facilitate continued contact with friends?
- ▶ Will residents be able to access local activities they had engaged in prior to moving?

Community Integration

- ▶ Does the proposed scheme link with other older people services?
- ▶ Will residents be able to access these services?
- ▶ Will people living nearby be able to access services within the scheme?

Safety

- ▶ Is this an area that will be attractive to older people in terms of feeling safe?
- ▶ How will the design of the scheme combat any perceived risks?

Progressive privacy

- 10.6.9 Centrally located communal facilities should be designed with progressive privacy in mind. Not only should there be a clear separation between areas just for residents, staff, and visitors; but a distinction between shared spaces for residents and those for the wider community is also important:
- ▶ Public spaces such as communal lounges and dining rooms along with ancillary spaces such as laundries and catering kitchens should be located centrally and away from residents' flats so there is no need to walk through these areas.
 - ▶ All site and building accesses should be securely controlled.
 - ▶ Entry points to the site should be kept to a minimum.
 - ▶ Any additional entry points should lead directly to the main entrance door or service areas.

Layout and Internal Circulation

- 10.6.10 In relation to layout and circulation:
- ▶ The building should have a logical layout that can be clearly understood to assist people suffering from dementia or memory loss. Breaking down the building into identifiable zones and the provision of visual clues and signage will assist wayfinding.
 - ▶ Communal areas that could be shared with or visited by the public, such as the lounge and the dining area, should lead from the main reception area if possible.
 - ▶ Circulation areas should be adequately designed for the frail and the wheelchair user and long dull vistas should be avoided.

- ▶ Walking distances for all users of the building should be kept to a minimum by the sensible location of stairs and lifts. It is ideal for both a lift to all floors and stairs to be easily reached from the main entrance.
- ▶ To break up walking distances for residents small seating bays could be introduced to provide as rest stop or meeting place.
- ▶ Terminating corridors with a place to sit and enjoy a view can avoid the sense of frustration suffered by residents with short term memory loss who might wander to the end of corridors.

Acoustics

- 10.6.11 In planning the layout, consider the acoustic separation of noisy rooms such as laundries, lift motor rooms, plant rooms and other communal spaces from residents living, sitting, and sleeping areas.
- 10.6.12 If layout permits, try to ensure that the living rooms of two adjoining flats are next to each other, and bedrooms of adjoining flats are next to each other.

Adaptability

- 10.6.13 In relation to adaptability:
- ▶ Flexibility should be a major consideration in order to avoid redundant buildings in the future or the need for residents to move on to other accommodation as specialist housing is always subject to changes in policy, legislation, funding, and allocation arrangements.
 - ▶ At any one time it is likely that only a proportion of Extra Care residents will use a wheelchair. A resident may arrive in the scheme as a wheelchair user, or the onset of mobility difficulties may occur at any time during a resident's tenancy. Access should be developed in accordance with [Building Regulations Part M Category 2 and 3](#).
 - ▶ As maximum flexibility is essential, the architecture and structural designs should allow for this. Communal areas on the ground floor should be arranged within the footprint of flats above for structural design.
 - ▶ Adequate storage provision is often overlooked and should be included from the outset particularly for bulky items like mobility scooters.
 - ▶ Climate adaptability is a key requirement due to the disproportionate effect of temperature variation on older or more vulnerable people. Passive design solutions are preferred as opposed to energy intensive solutions like air-conditioning that magnify heat island effects.
 - ▶ Immediate access to technology or the ability to install smart technology and personal computer systems at a later date should be considered as a means to 'future-proof' homes.
 - ▶ Careful consideration should be given to the size of dwellings and the number of bedrooms. A balance needs to be struck between current cost constraints and likely future demand for increased space standards and a second or even third bedroom. Evidence shows that a second bedroom is a high priority for residents where the rent level or purchase price allows.



Figure 281: (top) Priory View, Dunstable
Figure 282: (bottom) Wixams Care home

Garden Areas

- 10.6.14 In relation to garden areas:
- ▶ The gardens associated with Extra Care accommodation function on several levels, providing both stimulating views from within the building and potential for extending internal activities into the immediate surroundings.
 - ▶ This external space can be divided into a sequence of activity zones: the location of terraces and patios alongside a lounge or conservatory enables the extension of living space out into the garden.
 - ▶ Hard standings should be flush with internal floor levels and large enough to readily accommodate a table and chairs.
 - ▶ The garden should also incorporate a large level grassed or paved open space to provide flexibility for activities such as outside eating, barbecues, or the siting of a marquee for communal garden parties.
 - ▶ Communal garden areas including raised and accessible beds encourages community, activity and outdoor therapy.
 - ▶ Pergolas and other garden features can provide immediate shading for south facing aspects or seating areas. Water features can contribute to an aurally stimulating and tactile environment and provide effective focal points for garden vistas.
 - ▶ Water features and trees providing natural shade can reduce air temperatures and urban heat gain.

Supporting Impairments

- 10.6.15 In order to support impairments:
- ▶ 'Free-swing' door closers linked to the fire alarm should be fitted to the front doors of flats and other doors regularly used by residents. This will avoid the hazard and frustration associated with heavy overhead door closers.
 - ▶ Vision panels to doors along circulation routes and leading to communal rooms should be considered.
 - ▶ Handrails along both sides of circulation routes that are appropriately scored to assist wayfinding for those with visual impairments should be installed.
 - ▶ Appropriate ironmongery taps etc for older people with limited dexterity should be specified.
 - ▶ At least one stretcher sized lift should be included to accommodate long-base wheelchairs/ stretchers/coffins.
 - ▶ Wheelchair standard design should be provided throughout the building.
 - ▶ Allowances for future changes should be designed in from the beginning. The construction and detailing of the building should allow for ceiling hoists to be retrofitted within flats and stud-partition walls should be reinforced for grab rails in bath and shower rooms. Modern product design should be accommodated from the outset as attractive non-institutional features of dwellings, for example bathroom features with incorporated grab rails such as toilet roll holders.
 - ▶ Level-threshold showers with a fall in the floor of the shower tray area to minimise the risk of flooding should be specified.

Internal Specifications

- 10.6.16 The following internal specifications are required:
- ▶ Care Services Improvement Partnership Standards
 - ▶ Type of Room Internal area square metres
 - ▶ 1 bed 2 persons flat - 54 square metres
 - ▶ 2 bed 3 persons flat - 68 square metres
 - ▶ Communal lounge - 1.5 square metres per flat
 - ▶ Dining area - 1.2 square metres per flat
 - ▶ Small lounges - 2 minimum
 - ▶ (Hobby rooms) - 15 square metres
 - ▶ Communal Toilet Facilities - 4 square metres
 - ▶ Assisted bathrooms - 12-15 square metres
 - ▶ Storage area for Scooters etc. - 25-30 square metres
 - ▶ Staff Office - 18 square metres
 - ▶ Staff Overnight Room - 18 square metres
 - ▶ Staff Rest Room - 20 square metres
 - ▶ Guest Room with en-suite - 20 square metres
 - ▶ Any other facilities e.g. shop/therapy room - 6 square metres

Lighting

- 10.6.17 With regards to lighting:
- ▶ Lighting design is crucial so a range of different luminaries and light sources should be employed to avoid glare and sharp shadows.
 - ▶ Careful design of switching and dimming will ensure that different atmospheres can be created, and different needs catered for.
 - ▶ Natural lighting should be maximized as this can impact health and wellbeing, way finding and levels of solar gain.
 - ▶ Corridors should ideally be lit from windows or rooflights (including kitchen windows onto corridors) to avoid long, dull vistas.
 - ▶ Balconies and winter gardens enable natural light and views of nature and contribute to wellbeing.
 - ▶ Numerous light fittings in a regimented array, which may cause a clinical, institutional appearance, should be avoided.
 - ▶ Sharp contrasts between highly lit and dark spaces should be avoided, as the ability of one's eyes to adapt to different levels of light decreases with age.
 - ▶ Lighting should be installed along the main routes of pathways so that the garden can be used safely in the evening.
 - ▶ Good lighting is also required to all parking areas to provide surveillance lighting and CCTV as required for security.

10.7 Designing Residential and Nursing Care Homes

10.7.1 In terms of the structure of the building, there is no difference between a residential care home and a nursing home as the difference centres around the need for a registered nurse to be on site 24 hours a day in nursing homes. Both homes serve patients requiring preventive, therapeutic, and rehabilitative and/or care services for non-acute long-term conditions. Most residents are frail and aged; some may have varying degrees of dementia; some may be bedridden, and others will be using a variety of mobility aids. Stays are generally relatively long or can be until the end of life.

10.7.2 These care homes therefore present special design challenges, in that for residents they are not just facilities, but their homes. The quality of the physical environment plays a large role in resident satisfaction. Effective design starts with a floor plan that encourages social interaction and includes various features that create a sense that it is a home, whilst maintaining the necessary levels of functionality and security for all users. This guidance applies equally to conversions of existing buildings and to new build homes.

10.8 Key Principles for residential and nursing care homes

- 10.8.1 Residential and nursing care homes should be designed in accordance with the following key principles:
- ▶ Consider unit style developments where the home is broken into 8-10 bed units each with its own communal space in the form of a kitchenette and dining space. This arrangement also allows for different levels of care within the same overall scheme; for example, nursing, dementia, frail, complex and even temporary residents in need of re-ablement and recovery can be accommodated.
 - ▶ Consider views from windows in the communal areas, as residents may not be able to access outside space, so these become particularly important. Views that provide movement and interest like school playgrounds, play areas or parks are particularly engaging for residents.
 - ▶ Ensure that outdoor areas are accessible and safe and set aside adequate space (at least 5 square metres for each habitable room) for gardens, as this access to immediate outside space is important for those who may be less mobile.
 - ▶ Give spaces a homelike, rather than institutional, size and scale with natural light and views of the outdoors.
 - ▶ Create a warm reassuring environment by using a variety of familiar, non-reflective finishes and cheerful, varied colours and textures, keeping in mind that some colours are inappropriate and can disorient or agitate impaired residents.
 - ▶ Promote traditional residential qualities of privacy, choice, control, and personalization of one's immediate surroundings.
 - ▶ Encourage resident autonomy by making their spaces easy to find, identify, and use. This is particularly important for those with dementia.
 - ▶ Many nursing homes and assisted living facilities maintain one common dining area. Communal dining areas can be cavernous and impersonal so consider how the space can be broken up using internal walls and other features.
 - ▶ Provide higher lighting levels than typical for residential occupancies.

- ▶ Families often do not visit or visit for only a short time because of the lack of a comfortable private space to spend time with the person needing care. A room that families can use to spend time together equipped with a kitchenette and en-suite facilities should be provided.
- ▶ Create reserved parking for visitors in line with the Councils Parking Standards for New Developments SPD.
- ▶ Have wheel-chair accessible kerbs and ramps that are easily identifiable.
- ▶ Have clearly marked signage that identifies the entrance.
- ▶ Effective ventilation, which may need to exceed nominal design levels.
- ▶ Use multiple cues from building elements, colours, texture, pattern, and artwork, as well as signage, to help residents understand where they are, what their destination is, and how to get there and back.
- ▶ Identify frequently used destination spaces by architectural features and landmarks which can be seen from a distance, as well as symbols, signage, art, or landscaping.
- ▶ Avoid prominent locations and high visibility of doors to spaces which patients should not enter.
- ▶ Comply with the requirements of the Part M of Building Regulations and all relevant UK regulations.
- ▶ Increased use of natural light, natural materials, and textures.
- ▶ Use of artwork.
- ▶ Attention to proportions, colour, scale, and detail.
- ▶ Bright, open, generously scaled public and congregate spaces.
- ▶ Homelike and intimate scale in resident rooms and offices.
- ▶ Appropriate residential exterior appearance, not hospital-like.
- ▶ Exterior compatibility with surroundings.
- ▶ Single Bedroom - 12 square metres usable floorspace (excluding en-suite facilities).
- ▶ Double Bedroom - Double rooms are not specified since the guidance suggests all rooms should be single occupancy unless two service users have made a positive choice to share with each other. If so, there should be at least 16 square metres usable floor space (excluding en-suite facilities).
- ▶ Communal Areas - Provide sitting, recreational, and dining space (referred to collectively as communal space) apart from service users' private accommodation and excluding corridors and entrance hall amounting to at least 4.1 square metres for each service user.
- ▶ Bathrooms - A ratio of 1 assisted bath (or shower, provided this meets residents' needs) to 8 service users.
- ▶ Toilet facilities - En-suite facilities (at a minimum a toilet, shower and hand basin) are provided to all service users. It is recommended that a wet room style show is also provided.
- ▶ Other - Layout options ensure that there is room on either side of the bed, to enable access for carers and any equipment needed. Doorways into communal areas, service users' rooms, bathing and toilet facilities and other spaces to which wheelchair users have access, have a clear opening width of 800mm. A secure balcony should be provided to ensure well-being requirements are met during periods of isolation.

10.8.2 For all minimum standards see the [Independent living website](#).

10.9 Educational Establishments

10.9.1 The [Department for Education](#) provides standards and guidance for the design and construction of schools and further education college buildings and grounds. This includes advice on:

- ▶ [Standards for school premises](#)
- ▶ [Assessing the area and capacity of schools](#)
- ▶ [Creating a design brief for a building project](#)

10.10 Special needs and alternative provision

10.10.1 All pupils, including those with special educational needs (SEN) and disabilities, should be able to access the full curriculum and be provided with appropriate support and intervention when necessary. Some of the issues to consider when designing a special school - or specially resourced provision at a mainstream school - are listed below:

- ▶ Accessibility
- ▶ Medical and therapy support
- ▶ Sensory needs
- ▶ Flexibility and adaptability
- ▶ Health and well-being
- ▶ Safety and security

10.11 Planning for sport in schools

10.11.1 Schools offer the potential to include sport facilities not only for the pupils but also the wider community. Many educational sites usually have very good sports facilities, which can often be underused out of normal school hours. Therefore, community use should be 'designed in' from the outset of a development proposal. For example, to enable and overcome potential barriers to community use separate secure community access could be included in proposals for educational provision at the early design stages. Community use should also be factored in to wider masterplanning of larger mixed-use developments, for example by ensuring appropriate siting of provision and co-location of facilities. [Sport England's School](#) toolkit provides a resource to support schools in opening their facilities to the community and keeping them open.



Figure 283: (top) Thornhill Primary built to Passivhaus standards, Dunstable
Figure 284: (bottom) Silsoe Lower School

10.12 Key design principles for Schools

- 10.12.1 These design principles seek to ensure the appropriate design of school buildings which addresses the development context and environmental constraints of the site, while encouraging health and wellbeing principles:
- ▶ Schools should be designed to prioritise pupil safety in a well-designed and appealing learning environment.
 - ▶ Active design principles should be embedded within the school building and around the site including play, social and entrance space.
 - ▶ School sites should be designed to maximise opportunities for environmental sustainability.
 - ▶ Schools should explore opportunities for wider community use, engagement and interactions to maximise the site and facilities.
 - ▶ The location should aim to provide the shortest travel distance to the greatest number of residents, and be accessible by pedestrians, cyclists and vehicles, taking proximity to existing communities into account where appropriate. New schools should prioritise sustainable travel with a focus on road safety, parking/drop off zones for parents, and infrastructure such as scooter/cycle parking.
 - ▶ The location should allow for the new school to be created at an appropriate phase of development. This would normally mean that the first school site/s would be available for transfer from the 1st occupation. The School Organisation Team can provide guidance on the required phasing.
 - ▶ The size of the site should meet site-size requirements, as set out by the Government Department for Education.
 - ▶ Land to be provided must be ready for construction. This includes, but is not limited to, being:
 - With sufficient services to the boundary of the school land to meet the needs of the size of school to be built.
 - Free of contamination, with relevant reports provided to certify this.
 - Level, as is required to be fit for purpose.
 - Free from flood risk and watercourses.
 - Not affected by any power cables, cordon sanitaire, bus routes or other planned or existing infrastructure.
 - Not be of any archaeological significance which could impact the development of the site (archaeological survey and development sign-off required pre-handover).
 - ▶ It should be free of anything else that could impede the timely construction of a functioning school site.



Figure 285: Thornhill Primary School, built to Passivhaus standards