

Shared surface streets

If designed well, shared surface residential streets give users more freedom in the way they are used, maximising space and prioritising pedestrian movement over motor traffic whilst encouraging motorists to reduce their speeds. They can work well on shorter stretches of residential streets with low traffic flows, but are not appropriate for busier roads.

Shared surface streets will only be supported:

- In small pockets within small to medium sized developments;
- On streets with very low traffic volumes; and
- Along active frontages

Shared surface streets are not an acceptable alternative to inadequate footways where space is not available to do so.

A mixture of shared surface and grade separated design within the same street will not be accepted as this can cause confusion for all users.



Fig 1: Shared surface with block paving

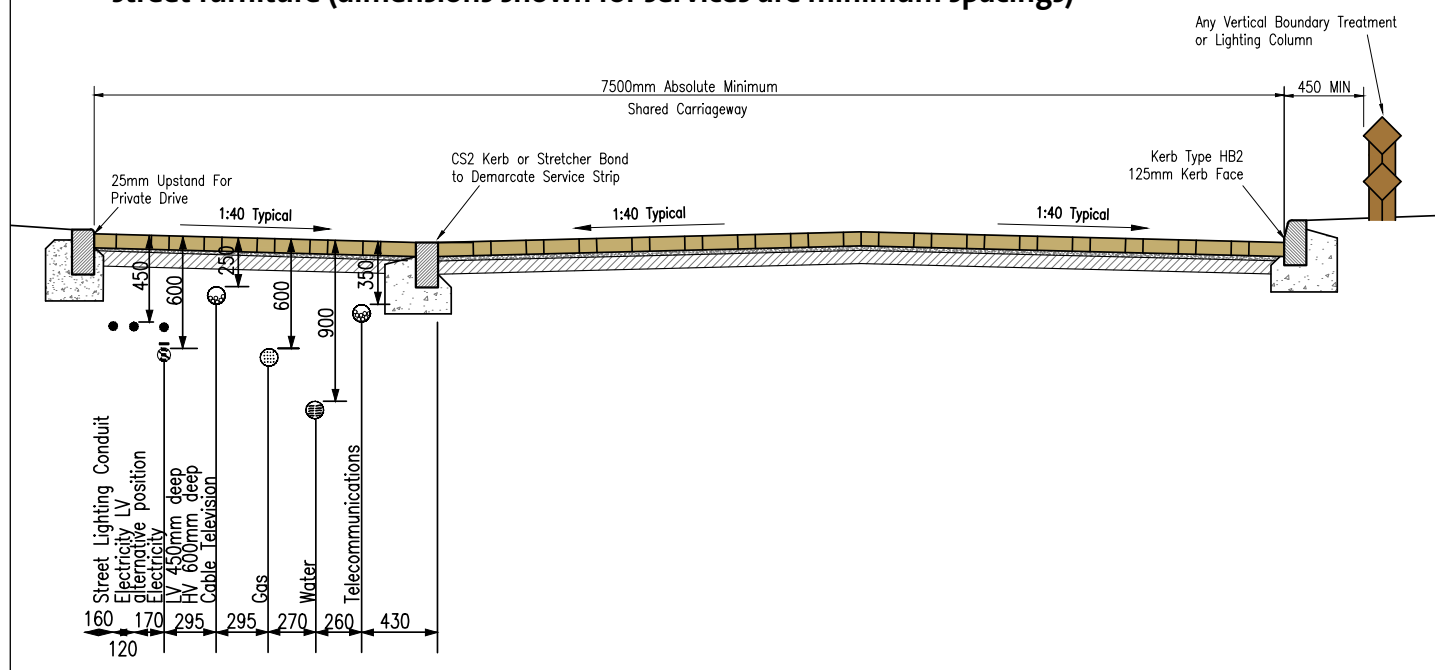
Design considerations

To create a successful shared surface street, designers should:

- Design a shared surface area with the intent of it being used for activities such as playing and socialising
- Consult with groups such as the RNIB so that the needs of pedestrians with visual impairments are taken into consideration
- Create well balanced, inclusive environments that clearly encourage and support priority for pedestrians and walking pace speeds
- Provide visual cues and tactile paving alongside de-cluttering to help those with a visual impairment and limited confidence
- Provide clear threshold treatments to indicate the start and finish of the shared space area from non-shared space areas
- Provide assessments of vehicle and pedestrian flows.

Street furniture can be used as a guide but should not obstruct desire lines. Bollards are not to be used as shorelines as these cannot be used as a guide by anyone with a visual impairment using a cane.

Fig 1: Typical cross section of shared surface residential street including underground services and street furniture (dimensions shown for services are minimum spacings)



Detailed Design

Detailed design requirements for shared surface streets are set out in the following table

Table 1: Shared surface streets – detailed design

Consideration	Minimum Requirements
Number of dwellings	Up to 25 individual dwellings units
Maximum design speed	Walking pace (5mph max)
Minimum carriageway width	Overall Corridor Width: 7.5m to include service corridor(s). 0.5m kerbed buffer areas will be required to protect buildings and street furniture
Swept path requirements	Any residential roads put forward for adoption must be able to accommodate 11.4m long refuse vehicle passing a large car Two 3.5T box vans passing Any turning areas must include appropriate waiting restrictions to prevent them from being blocked by parking vehicles.
On street parking	On-street parking bays can be designed into the scheme but this must be integral to the design

Consideration	Minimum Requirements
Footways	Contained within the overall corridor width
Cycleways	Contained within the overall corridor width
Max gradient	<p>Maximum: 1 : 20</p> <p>Minimum: 1:100 – to ensure positive drainage.</p> <p>(Where longitudinal gradient is slacker than 1 : 120 channel blocks will be required).</p>
Horizontal curve radius	To be determined by swept path analysis of vehicles likely to use the proposed street.
Vertical Curve Lengths	The minimum length of vertical curvature must be based on the required forward visibility to achieve the minimum Stopping Sight Distance (SSD). Speed limit of 20mph requires an SSD of 25m
Effective Straights	Not accepted
Junction Radii	N/A
Minimum Junction Spacing	A minimum distance between accesses and junctions must be 20m
Entry Transition	Must show a change in character from grade separated streetscape, to consist of a change of surfacing material, with ramp detail and tactile paving. See Standard Details
Visibility	Refer to Visibility Guidance.
Turning space	Where no through route is available, all streets to be put forward for adoption require a turning head that can accommodate an 11.4m long refuse vehicle with turning areas safeguarded from obstruction by parked vehicles
Service strip	<p>Refer to Standard Details and Underground Utilities guidance</p> <p>Services should be kept within delineated service strips at each edge of the shared surface area</p> <p>Landscaped service strips will not normally be adopted</p> <p>An easement will be necessary for utilities if the service areas are retained within private ownership</p>
Buffer strips	Where boundaries such as railings are provided, these must be set back 0.5m from the edge of the adoptable highway.
Materials	Block paving of a material suitable for adoption to ensure a different environment from grade separated streets. – see Standard Details and Palette of Materials

Consideration	Minimum Requirements
Drainage	<p>See Drainage section of website, and refer West of England SUDS guidance for unadopted areas.</p> <p>We do not currently accept SUDS within the adopted highway as a full drainage solution</p> <p>For crossfalls and longitudinal falls refer to Standard Details.</p>
Lighting	Lighting designs to be in accordance with Street Lighting Specification