

Approaches That Work

From this guidance and similar studies by CABI a series of approaches that have been shown to be successful include:

- » Responding rapidly to problems such as vandalism - sending a clear message that abuse will not be tolerated;
- » Reinstating park keepers/ wardens and town centre rangers to reassure visitors while discouraging anti-social behaviour;
- » Reasserting the clarity of design with open vistas and clear sight lines;
- » Fully engaging the community – including groups creating problems – in the process of reclaiming public spaces.

The benefits of investing in these approaches for public space can be three-fold:

- » Successfully tackling problems of anti-social behaviour;
- » Achieving long term cost savings;
- » Creating the neighbourhoods in which we all want to live.

(Preventing Anti-Social Behaviour In Public Spaces, CABI, 2004)



A safe public realm encourages people to use the streets

7 Materials

7.1 Material Selection

Material selection for all public realm elements has been influenced by four criteria which will need to be evaluated with equal weighting when designed in detail and specified:

- » Sustainability;
- » Cost;
- » Aesthetics; and
- » Function.

Cost

Investment in the public realm should be focused on areas within the Borough which are anticipated to attract high public usage and/ or which are visually prominent. These include:

- » Town and Local centres;
- » Key connecting streets;
- » Key gateways into the Borough and its centres.

The palette of public realm materials has been developed to reflect this investment hierarchy with the highest quality of materials proposed for the areas of highest usage and visibility. This does not mean that other areas will not receive improvements only that areas most in need of improvement or experience high volumes of pedestrian traffic should be prioritised.

Aesthetics

The aesthetics of the materials, furniture and lighting elements of the public realm are outlined in detail on the following pages. The components and materials have been selected to create a new contemporary identity for Merton which is emblematic of the vision for the Boroughs' public realm. Merton offers significant opportunity to create a modern image and a brand that determine the visual impression of its future while respecting,

enhancing and reflecting the existing local character of the borough. A simple uncluttered palette of materials and furniture has been selected which have key elements and materials in common to ensure a consistent approach throughout the Borough and its associated streets and spaces.

Function

The function of materials, furniture and lighting is inextricably linked to the sustainability of the street. Simple, robust materials have been selected to be fit for their intended purpose. The function of materials, especially paving materials will need to be carefully considered to ensure longevity. Furniture with combined functions such as poles which will accommodate lighting, traffic signals, banners and signage should be utilised to ensure a clutter free public realm. Consideration must be given to resistance to vandalism, ease of repair and the maintenance requirements.

Attention to Detail

Care and attention to detail in design and implementation is important in achieving a high quality public realm. Level transitions, pedestrian ramps, service covers etc. should all be detailed to avoid clumsy transitions between surfaces. Gradient changes will be designed to avoid unsightly cuts in the paving. In every case vertical elements will be located within a prescribed zone adjacent to the kerb to allow a clear, obstacle-free zone for pedestrians moving closer to building frontages.

8 Surfacing

8.1 Principles

As identified in the public realm strategy report, clear design of paving is vital to give a simple uncluttered appearance to the streetscape. To achieve this simplicity, a simple palette of a few materials and a set of standard details are outlined in this section which will allow the implementation of a clear streetscape style across Merton.

Paving flags of 900x600mm have been identified by TfL as a standard paving unit for TLRN routes. This dimension has been used traditionally on London streets for many years. Whilst there is only one TLRN route running through the borough, this paving unit should be used for all footway paving to provide a clear visual continuity.

A palette of three materials is defined for all footways:

- » Mid-grey granite – A medium- coarse textured durable igneous rock with a mid-grey colour which matches the ASP
- » Artificial Stone Paving (ASP) – this is a concrete flag paving product with a mid-grey tone.
- » Silver-grey granite – A medium- coarse textured durable igneous rock with a light-grey colour which provides a contrast to the tones of the ASP and Mid-grey granite.

In the borough centres the key material is grey granite, this has been chosen as it offers a high-quality appearance. Natural stone offers the advantage of being more durable in the long term and being a natural material has the potential to offer a more sustainable paving solution. For general footway paving this is 900x600mm flags. On raised tables and vehicle pull-ins 100x200mm setts should be used due to the additional stresses of vehicle turning in these areas.

Outside of the borough centres, ASP is to be used for footways.

This is consistent with the TfL guidance for the design of TLRN routes where ASP is the dominant material.

All kerbs should be of Silver-grey granite to provide a visual contrast with the paving materials and to provide a consistency throughout the borough. Granite kerbs are a traditional material used throughout London and are extremely durable and recyclable.

There is scope in key public spaces to provide other paving materials which help to lend an individual character. The appropriateness of materials for these situations should be assessed on a case by case basis, but they should compliment the established palette. The use of natural stone in these locations should be encouraged.

The zone of paving 1500mm from the kerb edge is most vulnerable to vehicle overrun and this is the most common place to see failure of footway paving, in the form of broken or loose slabs. To avoid this situation, this zone should be strengthened, by increasing the paving build-up and using fibre reinforced ASP or thicker granite slabs as appropriate.

Footways should be designed and installed to have a smooth, non-slip surface and have a gradient cross-fall of 1 in 40 to 1 in 60 to allow for natural drainage into road gutters. Where localised changes in gradient occur it may be necessary to cut slabs to achieve a smooth change in gradient. Cuts should be kept to a minimum and ideally kept in a single straight line, rather than numerous smaller cuts.

Generally paving slabs should be butt jointed and the use of mortar in-fills should be avoided as much as possible, as it gives an untidy appearance to footways. In borough centres the paving should be jointed with high-strength mortar to increase the strength of the paving.

Paving flags should be neatly cut around the back of the pavement adjacent to buildings, around sign/light posts, and along kerb lines to leave joints as narrow as possible.

Natural Stone Paving Materials

Natural stone paving will be used predominantly in pedestrian areas and raised junctions throughout the main centres of the Borough. The stones selected should:

- » Be robust and durable- tested to BS EN 1341:2001;
- » Be available from either the UK or Europe to reduce the carbon emissions generated from transport;
- » Reference local context.

Granite has been selected for the paving palette for the Borough giving flexibility in later detailed designs for public spaces in particular.

Granite

Sourced from either the UK, Europe or China, granites have traditionally been used in all over the UK and are very hard wearing and durable. The colour range is particularly attractive with greys, blues, buffs, pinks and blacks available which allows for combinations of colours to be used for a visually stimulating effect in key areas. Within the Borough they may be used for both paving, kerbs, footway pavements in key areas, paving in public spaces, furniture in public spaces and steps.

Application

Natural stone products will be utilised within the footpath areas and key spaces as the predominant material and for kerbing and accent materials. A combination of granite colours may be utilised within public spaces to highlight the different materiality and texture of the materials whilst ensuring a simple un-fussy ground plane with mid grey as the dominant colour tying into the surrounding streets.

Surfacing to roadways

Coloured surfaces on roadways should be used to increase the visibility of areas of roadway used by pedestrians and cycles. Red stone chip surfacing should be used in controlled crossing zones, and green stone chip surfacing used for cycle lanes, and cycle stopping zones at crossings. Bus stops and lanes should be marked in accordance with Department of Transport guidance. Other coloured zones should be discouraged



Mid-Grey Granite flags



ASP flags



Mid-Grey Granite sets

8 Surfacing

8.2 Paving Materials and General Setting out

Flag paving

Location	Key Town-Centre Footways and public spaces
Material	Granite
Colour	Mid-Grey
	In key borough centre spaces a small amount of other colours of granite can be used to highlight the space
Finish	Fine-picked
Dimensions	900x600mm
Bond	Staggered pattern with a 300mm offset
Setting-out	Paving flags to be laid perpendicular to the dominant kerb line (the line of pedestrian movement)

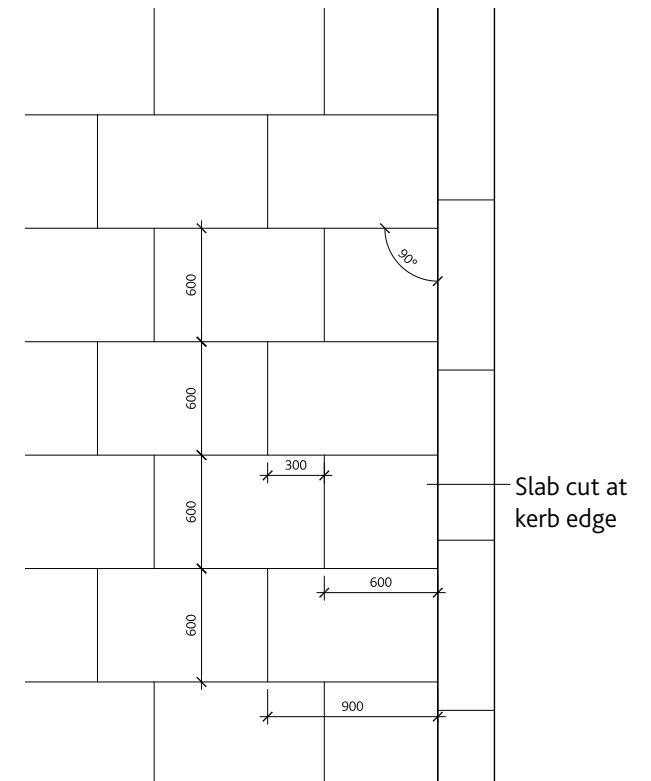


Mid-Grey Granite flags

Location	All Other footways
Material	Artificial Stone Paviers (ASP)
Dimensions	900x600mm
Bond	Staggered pattern with a 300mm offset
Setting-out	Paving flags to be laid perpendicular to the dominant kerb line (the line of pedestrian movement)

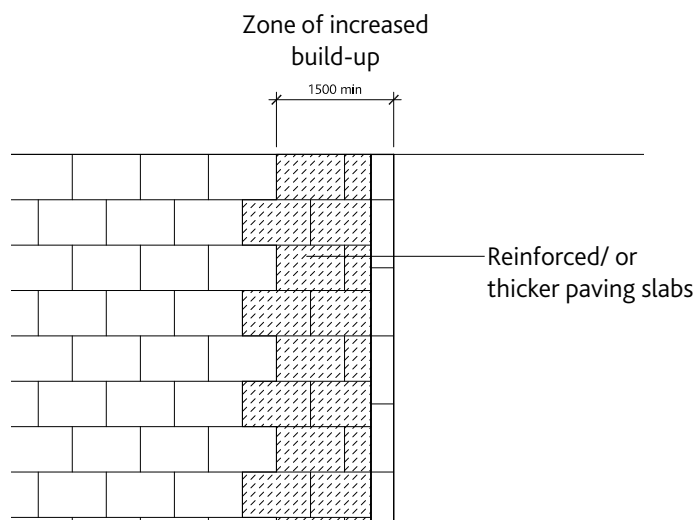
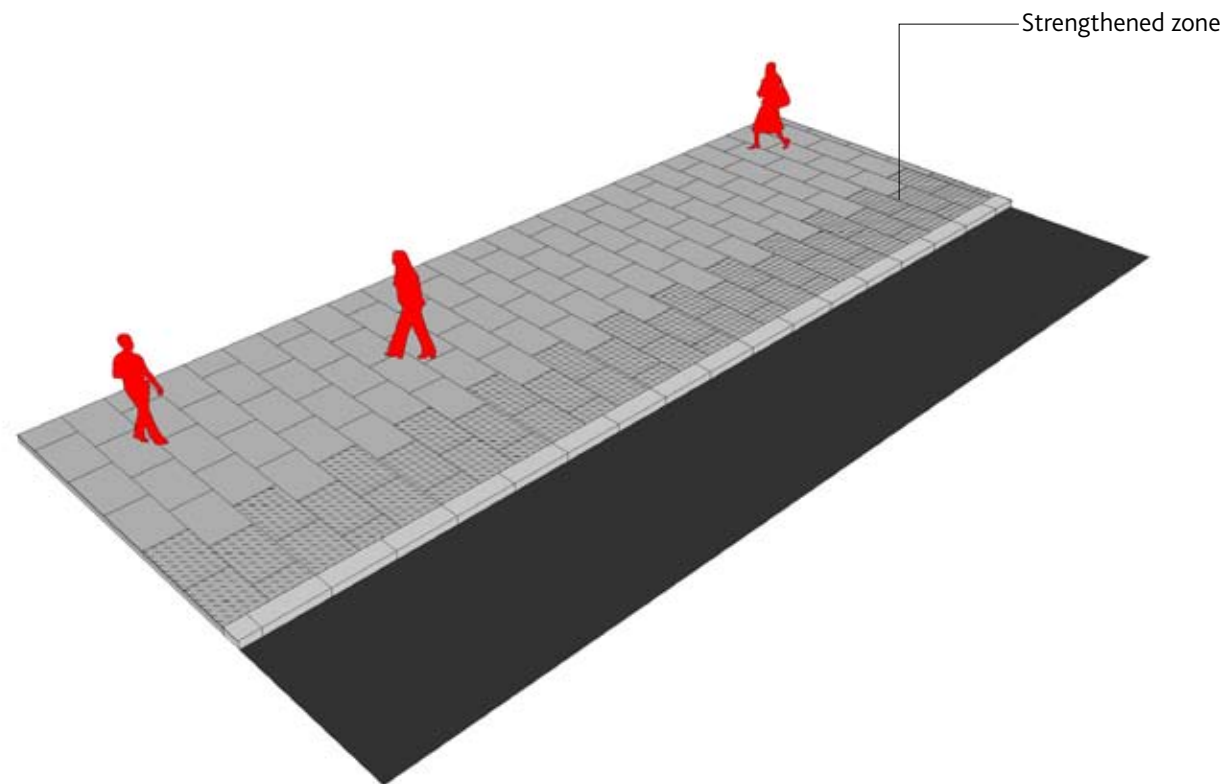


ASP concrete flags



8.2 Paving Materials and General Setting out
Flag paving -strengthened zone

Location	Where vehicle overrun is expected, namely: narrow junctions where large vehicles may mount the pavement to turn, narrow streets where passing vehicles may mount the kerb, where there is evidence of regular overrun ie. broken slabs
Dimensions	A zone minimum width 1500mm
Material	For ASP footways, fibre reinforced slabs should be used in this zone. For Granite footways thicker slabs should be used to engineer's details
Considerations	The build-up of this zone will need to be increased to accommodate vehicle loads.

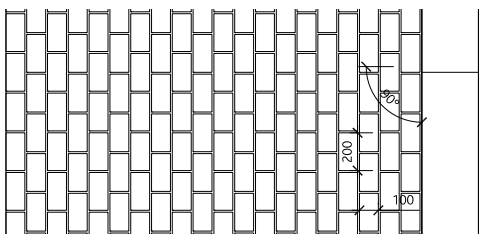


8 Surfacing

8.2 Paving Materials and General Setting out

Sett Paving

Location	Raised Crossings Vehicle pull-ins Vehicle access over footway Shared cycle lane/pedestrian marking
Material	Mid-Grey Granite
Dimensions	100x200mm
Bond	Stretcher bond
Setting-out	Setts to be laid perpendicular to the dominant kerb line Maximum joint width 10mm



Setting out principles for sett paving



Mid-grey granite sett paving

Coloured inset paving

Location	Yellow line, road markings on areas of granite setts
Material	Yellow PC concrete block paving
Dimensions	100x200mm



Yellow block paving for yellow lines

Bound Gravel Surfacing

Type	Permeable
Location	Tree surrounds Selected verge zones Private forecourts with shallow build-up zone for paving
Material	Permeable resin bound gravel
Colour	Harvest buff for trees pits, Grey for verges and private forecourts
	Installed to manufacturer's specification



Permeable gravel paving

8.2 Paving Materials and General Setting out

Exceptions

Type	Non-permeable
Location	Pedestrian pathways in green open spaces away from streets
Material	Resin bound gravel over tarmac paving
	Installed to manufacturer's specification
Considerations	PC concrete pin kerb to all edges to soft landscape



Resin bound gravel surfacing

Asphalt paving

Location	Temporary surface to make-good
	Very narrow footpaths where paving flags are not viable
	As a footway surface only where new footway surfaces are required but there is insufficient budget for ASP
Material	Mastic Asphalt or Bituminous macadam with fine grade aggregate



Asphalt paving

Existing historic paving

Location	Borough wide in selected locations
Material	Varies, typically granite setts
Approach	Repair and replace with like materials where necessary



Historic stone paving in Wimbledon village

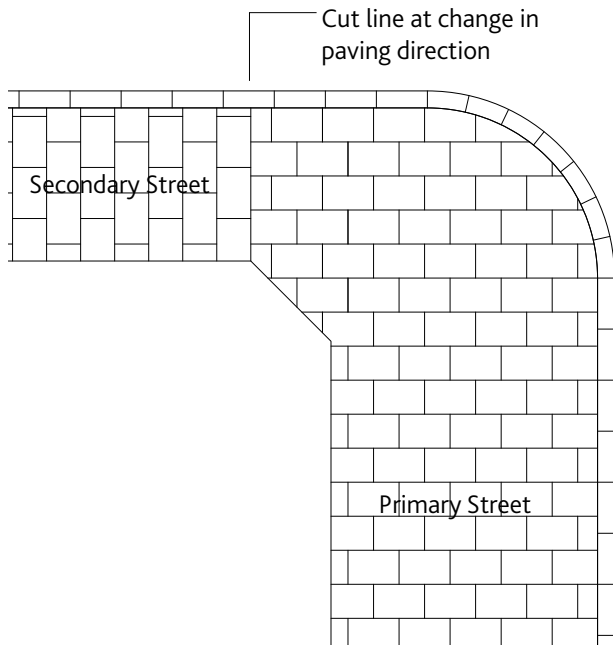
8 Surfacing

8.3 Paving setting out - corners

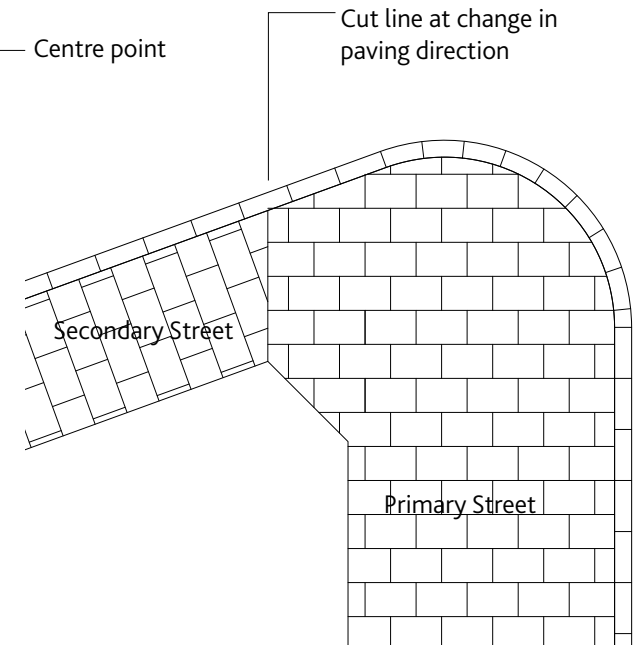
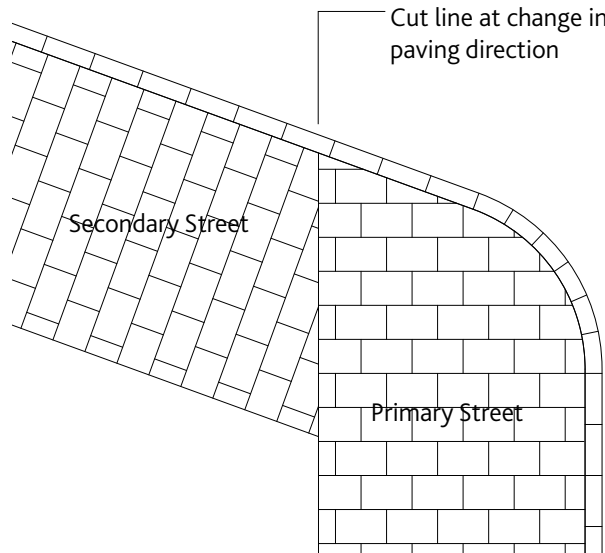
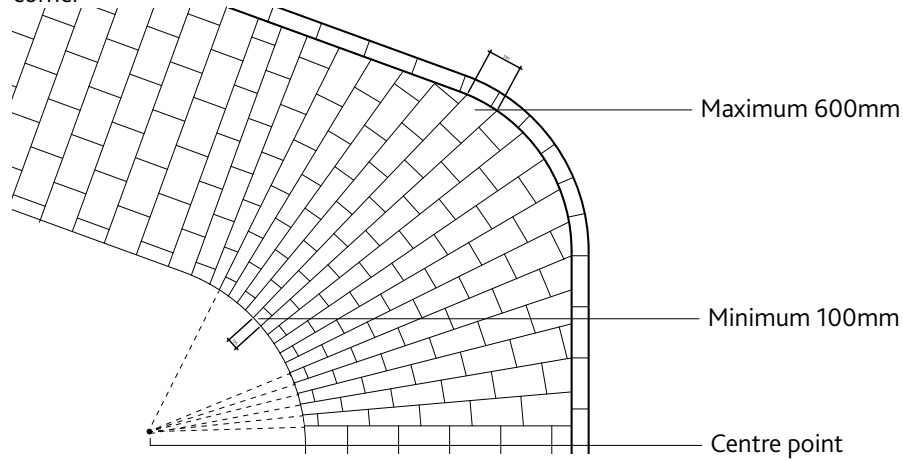
Dominant street paving direction takes priority at corners

A line parallel to the primary street kerb is struck from the back corner of the building as the cut line between paving directions

Where streets are equal priority slabs are cut to flow around corner



Where streets are equal priority slabs are cut to flow around corner

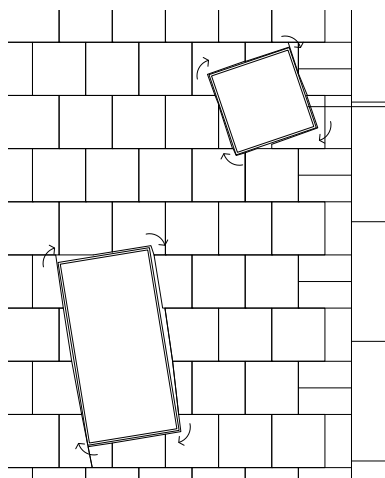


8.4 Access Covers

Type	Recessed
Location	All borough centre, connecting and local connecting routes
Considerations	Access covers in the pavement should be realigned so that edges are parallel to kerb lines (likely to be only undertaken during full reconstruction works).
	Paving slabs should be individually cut to fit the shape of the cover
	Any gaps between the cover and the paving slabs should be a maximum width of 50mm, and filled with mortar
Considerations	Paving slabs should be cut so that the joints and paving pattern is not broken by the cover
	In most circumstances service providers permission will be required

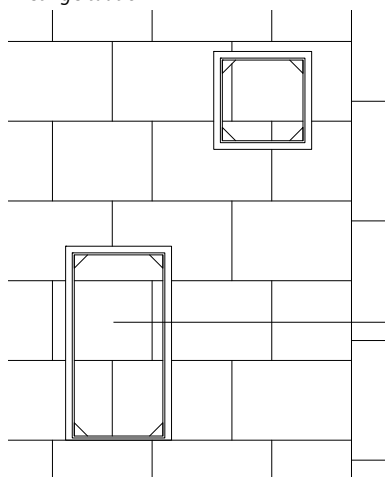


Recessed manhole cover lined-up with paving, and with neatly cut paving infill



Existing situation

Rotate access covers to be parallel to kerb line

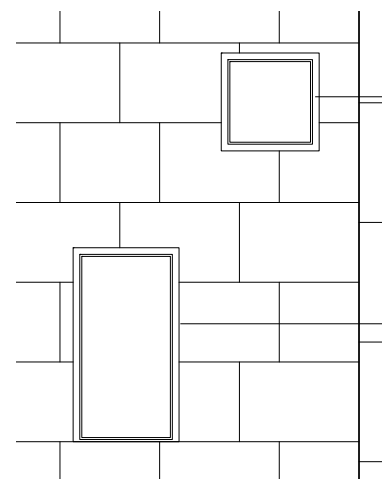


Proposed situation - stone paving in all town-centre and connecting route locations

Max. 50mm wide mortar around access covers

Paving cut to fit covers so that the paving pattern continues

Type	As existing
Location	Residential streets
Considerations	Access covers in the pavement should be realigned so that edges are parallel to kerb lines.
	Paving slabs should be individually cut to fit the shape of the cover
	Any gaps between the cover and the paving slabs should be a maximum width of 50mm, and filled with mortar



Max. 50mm wide mortar around access covers

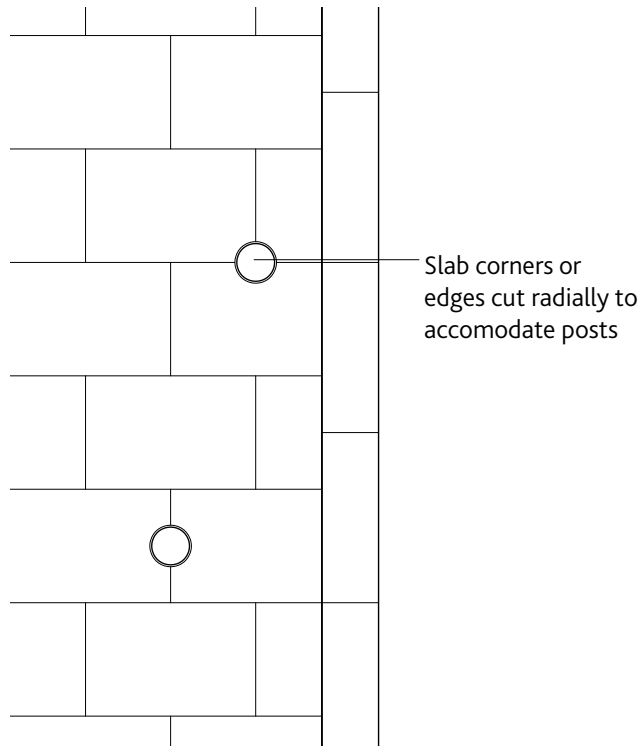
Paving cut neatly around covers

Proposed situation - Residential streets

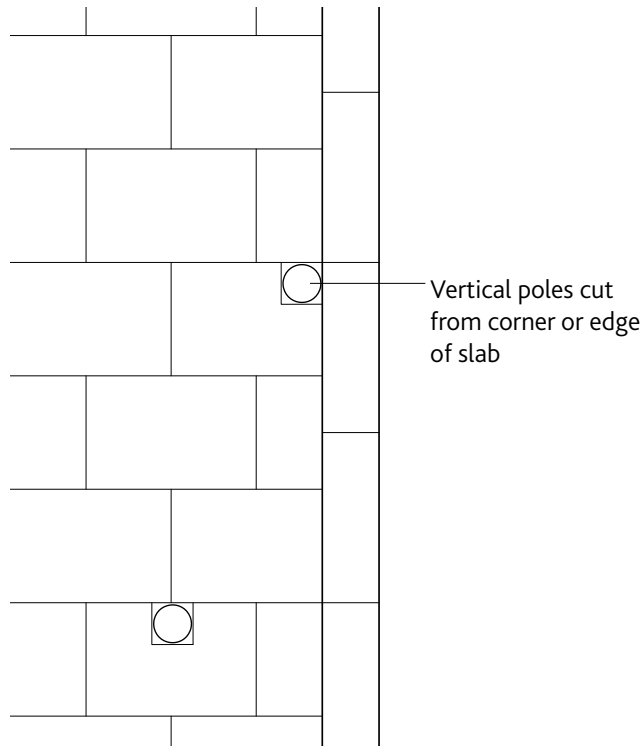
8 Surfacing

8.5 Vertical Elements Set Into Paving

Location	All borough centre, connecting and local connecting routes
Detail	Radially cut an aperture to the shape of the element, to allow a 10mm joint from the corner or side of a paving slab
Considerations	Mortar joint between post and paving slab



Location	Residential streets
Detail	A square should be cut from the corner or side of a slab to accommodate the element
Considerations	Mortar joint between post and paving slab
	Gap between slab and pole should be filled with mortar



Paving slabs neatly cut to fit around bollard