



Community and Enterprise Resources

National Roads Development Guide

South Lanarkshire Council Supplementary Guidance

This document has been written to compliment the National Roads Development Guide (NRDG). It highlights areas where South Lanarkshire's local policy/standards may differ from the NRDG.

It is essential that developers use this guidance in addition to the NRDG when working within South Lanarkshire, and cross reference the two documents. Developers may also require to refer to Designing Streets and the Design Manual for Roads and Bridges (DMRB).

Where sections of the NRDG are superseded entirely by guidance in this document, this will be indicated by the term "Replacement".

Where sections of the NRDG have been added to, this will be indicated by the term "Additional Text".

For the avoidance of doubt, should any information contained within this Supplementary Guidance contradict information within the NRDG or any other source, the Supplementary Guidance shall take precedent.

Parts of the NRDG which are amended or replaced are identified by page numbers below:-

Page 21

1.8 The Need for Consultation

Consultation should consider items such as, but not necessarily limited to the following:

Additional Text

- *Geotechnical information – ground investigation, factual and interpretative reports.*

Page 43

2.2.7 Street Detail

(a) Drainage and Sustainable Urban Drainage Systems (SUDS)

Design guidance can be obtained from The SUDS Manual, CIRIA no C697 and from SUDS for Roads. Additional local guidance for developers may also apply.

Additional Text

- *Contact South Lanarkshire Council's Flood Risk Management section who will provide on request a copy of the Council's Sustainable Drainage Systems (SUDS) Design Criteria Guidance Note.*

Page 47

2.2.7 Street Detail

(b) Flood Risk Management

The Local Authority's Flood Risk Management team should be consulted at the conceptual stage of all development to discuss these requirements.

Additional Text

- *Contact South Lanarkshire Council's Flood Risk Management section who will provide on request a copy of the Council's Sustainable Drainage Systems (SUDS) Design Criteria Guidance Note.*

Page 53

2.3.5 Adoption of Road Lighting and Electronically Controlled Signals etc

The road will not be adopted until the road lighting and control is completed.

Additional Text

- *Lighting infrastructure must be adopted concurrently with the main road adoption and will not be adopted in advance.*

Page 55

2.3.10 Structures Agreements

...the Local Roads Authority will be responsible only for maintaining the road surface.

Additional Text

- *In such circumstances South Lanarkshire Council may require to enter into a Legal Agreement with the developer or owner of the structure to ensure timeous completion of future inspection and maintenance commitments.*

Page 55

2.3.11 Road Bonds

To clarify this issue, everything that conventionally constituted a road will be included in that valuation and includes carriageway, footway, cycle tracks, remote footpaths, verge, service strips, lighting, drainage and any works normally associated with the road works.

Additional Text

- *Note that the Road Bond must also include the cost of any SUDS facility/device in its valuation.*

Page 59

2.4.2 (b) Design of Structures

Where the submission includes proposals for road structures (eg culverts, retaining walls or bridges)

Additional Text

- *or includes amendments or changes to the use of existing structures,*

Page 70

3.1.1 Junctions

The range of junction types and arrangements are discussed in *Designing Streets* (page 36). This section details required junction criteria to enable a design to function correctly in relation to its user demands.

Additional Text

- *Note that for major junctions on high speed roads (50mph or above), the guidance in Designing Streets is not appropriate and the DMRB must be referred to for guidance.*

Page 71

3.1.1 Junctions

(h) Application

However, on main and strategic routes, forward visibility is considered where journey time is an economic factor.

Additional Text

- *Note that major roads subject to speed limits of 50mph or above generally must be considered in relation to the visibility criteria given in the DMRB, as the reduced criteria in Designing Streets is not appropriate. If however the road is minor and speed surveys can demonstrate that 85th percentile speeds are below 40mph, Designing Streets visibility criteria may be used.*

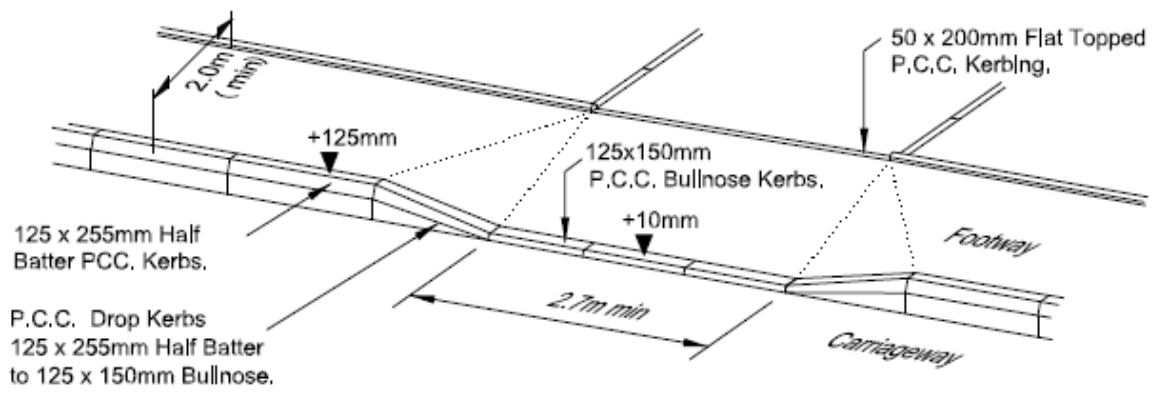
Page 72

3.1.2 Private Access

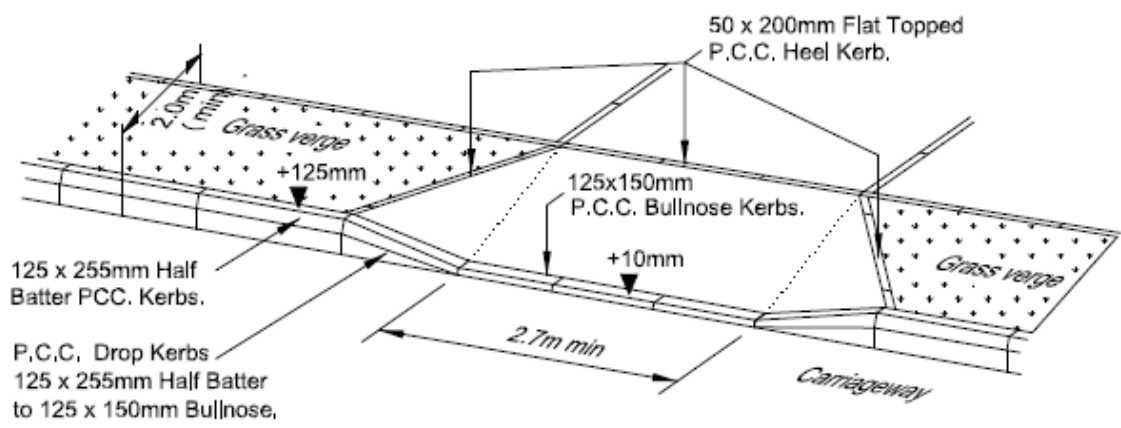
(c) Individual Dwellings

Additional Text

- *It should be noted that where a vehicular dropped footway crossing is required, the footway level must be reprofiled over its full width, or in the case of very wide footways over a minimum width of 2.0m. This prevents an excessively steep lateral gradient and slipping risk. See Figure 1.*



Vehicular Footway Crossing



Vehicular Service Strip Crossing

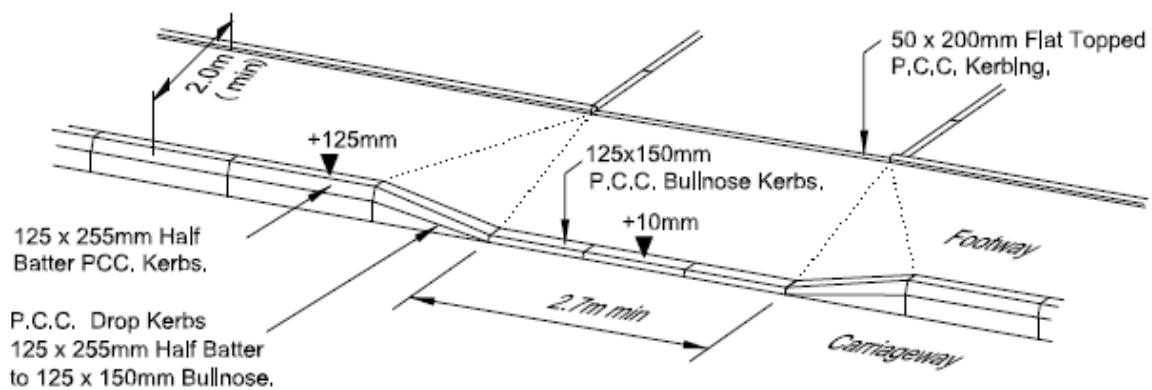
- **Figure 1 - Vehicular Footway and Service Strip Crossings**

3.1.4 Pedestrians and Cyclists

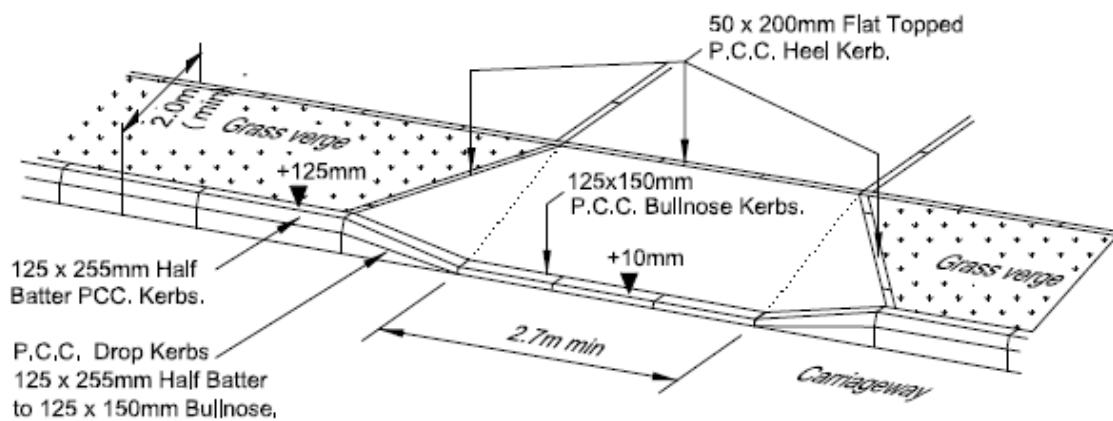
Pedestrian Priority at Vehicle Access

Additional Text

- It should be noted that where a vehicular dropped footway crossing is required, the footway level must be reprofiled over its full width, or in the case of very wide footways over a minimum width of 2.0m. This prevents an excessively steep lateral gradient and slipping risk. See Figure 1.



Vehicular Footway Crossing



Vehicular Service Strip Crossing

- **Figure 1 - Vehicular Footway and Service Strip Crossings**

Page 102

3.1.6 Statutory Undertaker Services

(k) Planting in Service Strips

Additional Text

- *Note that no walls, fences, trees or shrubs are permitted to be located within service strips.*

Page 102

3.1.6 Statutory Undertaker Services

(l) Road Opening Consultations and Consents

...before any excavation is undertaken in a public road.

Additional Text

- *Windfarm developers in particular should ensure that discussions regarding national grid connections and cable routing are undertaken early in the design process and are ideally run in parallel with the Planning and Road Construction Consent processes.*

Page 104

3.1.7 Rural Areas

(c) Road Widths – Developing on Existing Roads

Note this requires statutory consents such as a Section 56 Roads (Scotland) Act 1984.

Additional Text

- *It should be noted that widening roads can present significant issues if structures are affected. In such cases the application would be subject to Technical Approval procedures as outlined in BD2 of the DMRB.*

Page 105

Visibility Splay

Additional Text

- *Note that major roads subject to speed limits of 50mph or above generally must be considered in relation to the visibility criteria given in the DMRB, as the reduced criteria in Designing Streets is not appropriate. If however the road is minor and speed surveys can demonstrate that 85th percentile speeds are below 40mph, Designing Streets visibility criteria may be used. In certain circumstances, other roads which are subject to lower speed limits may be assessed using DMRB criteria at the Local Authority's discretion.*

Speed Visibility Relationship

Additional Text

- Note that major roads subject to speed limits of 50mph or above generally must be considered in relation to the visibility criteria given in the DMRB, as the reduced criteria in *Designing Streets* is not appropriate. If however the road is minor and speed surveys can demonstrate that 85th percentile speeds are below 40mph, *Designing Streets* visibility criteria may be used. In certain circumstances, other roads which are subject to lower speed limits may be assessed using DMRB criteria at the Local Authority's discretion.

Page 106

Access Points

Additional Text

Individual Dwellings

Access to individual dwellings should be by means of a dropped kerb footway / verge crossing as shown in Figure 1. Visibility at driveways should be as detailed in Table 1 below.

Table 1 - Driveway Visibility Splays in Urban and Rural Areas

| 'X' Distance (m) | 'Y' Distance (m) | Roads to be Accessed |
|------------------|----------------------------------|------------------------------|
| 2 | 20 | Traffic Calmed Roads |
| 2 | 35 | Residential Roads |
| 2.5 | 'Y' Distance from Tables 2 and 3 | Other roads not listed above |

Table 2 – 85th percentile speed

| | | | | | | |
|------------------------|-----|-----|-----|-----|------|----|
| Major road speed (mph) | 75 | 62 | 53 | 44 | 37.5 | 30 |
| "Y" Distance (m) | 295 | 215 | 160 | 120 | 60 | 43 |

Table 3 - Speed Limit

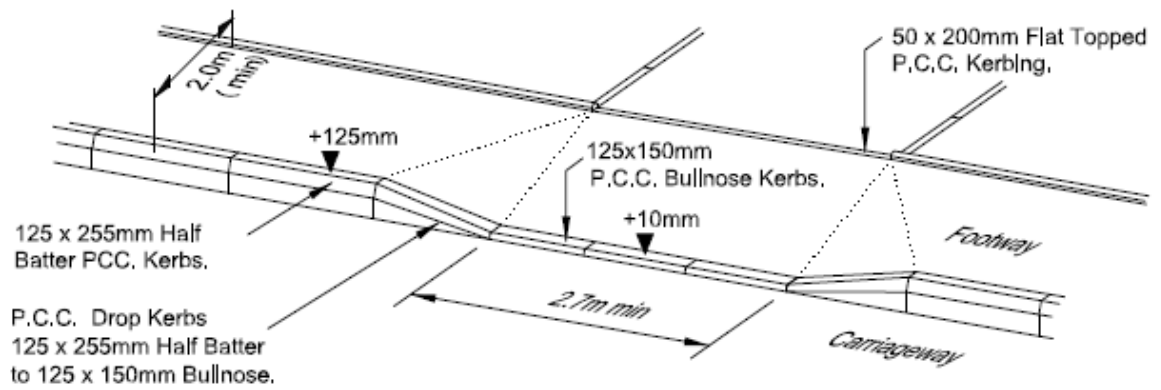
| | | | | | |
|-------------------|-----|-----|-----|----|----|
| Speed Limit (mph) | 70 | 60 | 50 | 40 | 30 |
| "Y" Distance (m) | 295 | 215 | 160 | 60 | 43 |

Layout / Vehicle Visibility

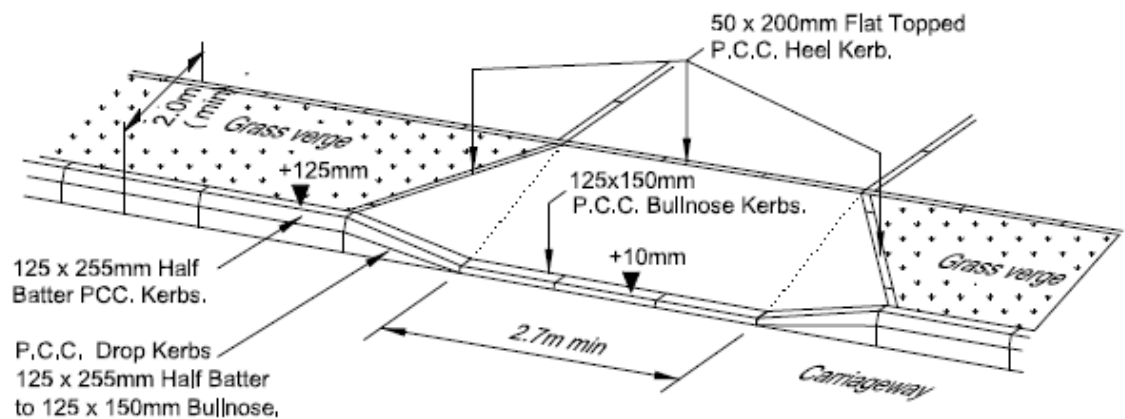
Layouts of other types of access should provide the appropriate visibility by choosing an "X" distance relative to the number of vehicles using the access with a "Y" distance appropriate to the speed of traffic on the road.

Pedestrian Visibility

It is important that drivers emerging from driveways are able to see pedestrians, especially children approaching on the footway. Therefore a visibility splay of 2.4 m x 2.4 metres measured from the heel of the footway is required at all driveways. In this instance nothing higher than 900mm will be permitted within the visibility splay.



Vehicular Footway Crossing



Vehicular Service Strip Crossing

- **Figure 1 - Vehicular Footway and Service Strip Crossings**

Page 109

3.2 Transport Assessment

Subpara (a)

“Scoping letter by the developer to the Local Roads Authority”

Replacement

- *Scoping form (available from South Lanarkshire Council).*

Page 115

3.4.1 Geotechnical Considerations

(b) Supporting Technical Information

After subpara (b) add Additional Text

The most recent standards for ground investigation and testing are to be used:-

BS 5930:1999 + A2:2010

BS 10175:2011 + A1:2013

BS 1377:1990

BS EN ISO 17892-2014

Page 115

3.4.1 Geotechnical Considerations

(b) Supporting Technical Information

After subpara (d) add Additional Text

(e) long sections of the proposed roads showing the locations and logs of exploratory holes, existing and proposed ground levels and conjectured soil horizons.

3.4.1 Geotechnical Considerations

(g) CBR

After end of para (g) CBR, add Additional Text

(h) Slope Stability

Where there are soil slopes within influencing distance above or below the roads, footpaths or verges slope stability analyses will be required.

(i) Retention

Retention structures using gabion baskets or timber crib construction shall not be acceptable. Concrete cribwork may be used subject to agreement where there is no vehicle retention required and where the location minimises the risk of vandalism.

(j) Embankments and Fill

Embankments and areas of upfill may require to be monitored over a period of time to demonstrate that settlement is complete before adoption.

(k) Mining

A mineral stability assessment will be required where the published information, BGS or Coal Authority report indicates a risk of mining subsidence. The report shall include road sections showing the mineral conditions based on core recovered boreholes.

In general the road shall be considered stable only where there is intact rock cover to worked horizons exceeding ten times the seam thickness. The assessment of cover shall not include any type of soil or overburden. Where there is insufficient cover suitable treatment will be required.

Suspected mine entries shall be searched for and located. If not found then the surrounding area will normally be considered sterile and road construction excluded.

Roads shall not be constructed over mine entries. Where a road does not encroach within a distance equal to the depth of rock cover then treatment will not normally be required although this will depend on the ground conditions. Where the road does encroach within this distance then treatment appropriate to the conditions and the proximity will be required.

(l) Ground Gases

Where gas is encountered remedial measures such as vented street furniture may be necessary. A residual risk to Local Authority workers after adoption from toxic, asphyxiant or explosive gases shall not be accepted. This includes exploratory excavations to the drainage or sewers.

(m) Combustible Materials

Fill or soils suspected of having combustible content shall be checked for calorific value. In general materials with a c_v exceeding 5% shall not be accepted below adoptable roads or footpaths. Loss on Ignition testing shall not be a suitable alternative to calorific value.

(n) Geotechnical Processes

Specialist geotechnical processes shall be subject to approval and appropriate monitoring. Depending on the technique, the commencement or the length of the maintenance period may be affected.

(o) Specification and Completion Reporting

In every case, recommendations contained in interpretative reports shall be incorporated into the scheme design. Appropriate Methods of Working, drawings and Specification shall be provided for approval. Where there are significant earthworks or other geotechnical processes validation and completion reporting by suitably qualified specialists may be required.

Pages 119 and 120

3.4.4 Carriageway Construction

(b) The Use of Secondary or Recycled Materials

Removal in entirety of paragraph commencing “Bitumen bound materials”.

Removal in entirety of sentence commencing “Hydraulically bound mixtures”.

Additional text before (c) Two Stage Construction

It should be noted that South Lanarkshire Council does not permit the use of hydraulically bound mixtures in any of the pavement layers, nor does it permit the use of reclaimed asphalt within any of the bound pavement layers.

Page 123

3.4.6 Footway, Footpath and Cycle Track Construction and 3.4.7 Kerbs and Edging

Replacement in Full of Both Sections

Construction

Footways, footpaths and cycle tracks should be constructed in accordance with Tables 4 and 5 respectively unless an alternative design is agreed with South Lanarkshire Council.

Table 4 - Footway, Footpath and Cycle Track Construction in Urban Areas

| Type | Sub-base | Base | Binder course | Surface course |
|---|--------------------------------|---|---|---|
| Flexible Surfacing | 50mm Granular Type 1 (cl803) | 100mm Type 1 Granular Material (cl 803) | 50mm Dense Asphalt Concrete (cl 906) | 30mm Hot Rolled Asphalt (cl 910) (see note 1) |
| Concrete Block Paving or Clay Pavers | 150mm Granular Type 1 (cl 803) | | 40±10mm Bedding Layer of Sharp Sand or Crushed Rock Fines | 200x100x65mm thick rectangular Concrete Block Paving (cl1107) or Clay Pavers (cl1108) (see note 2) (see note 3) |
| Precast Concrete Slabs (See note 4) (Not suitable for cycle tracks) | 150mm Granular Type 1 (cl803) | | 25±10mm Bedding Layer for small slabs of Sharp or Crushed Rock Fines or 40±10mm Bedding Layer for large slabs of Sharp Sand or Crushed Rock Fines | Footways and footpaths: Slabs 400x400x65mm (cl 1104 A) Footpaths only: 450, 600 or 900x600x65mm (cl 1104 A) |
| In situ Concrete (see note4) | 150mm Granular Type 1 (cl 803) | | 75mm 25/37.5 Concrete (cl 1704) | 40mm Granolithic (cl 1106 A) |

Table 5 - Footway, Footpath and Cycle Track Construction in Rural Areas

| Type | Sub-Base | Base | Binder Course | Surface Course |
|---|--|------|---|---|
| Flexible Surfacing | 200mm Type 1 or recycled suitable material (e.g. planings) | | 50mm Dense Asphalt Concrete (cl 906) | 25mm Hot Rolled Asphalt (cl 910) or 25mm Close Graded Asphalt Concrete (cl 912) |
| | | | Combined 50mm Close Graded Asphalt Concrete (cl 912) | |
| Concrete Block Paving or Clay Pavers | 150mm Granular Type 1 (cl 803) | | 40±10mm Bedding Layer of Sharp Sand or Crushed Rock Fines | 200x100x65mm thick rectangular Concrete Block Paving (cl 1107) or Clay Pavers (cl 1108) (see note 2) (see note 3) |
| Precast Concrete Slabs (see note 4) (Not suitable for cycle tracks) | 150mm Granular Type 1 (cl 803) | | 25±10mm Bedding Layer for small slabs of Sharp Sand or Crushed Rock Fines or 40±10mm Bedding Layer for large slabs of Sharp Sand or Crushed Rock Fines | Footways and Footpaths: Slabs 400x400x65mm (cl 1104) Footpaths only: 450, 600 or 900x600x65mm (cl 1104) |
| In situ Concrete (see note 4) | 150mm Granular Type 1 (cl 803) | | 75mm 25/37.5 Concrete (cl 1704) | 40mm Granolithic: (cl 1106) |

Note 1 Prior to compaction, 6mm or 10mm limestone or other approved chippings shall be applied to the surface at a nominal rate of 1kg/sqm.

Note 2 A water based bonding agent should be applied to seal the joints, and blocks should be hand swept for the first month.

Note 3 Developers should follow manufacturer's instructions/recommendations when laying concrete or clay block paving.

Note 4 This will only be acceptable in exceptional circumstances with the prior approval of South Lanarkshire Council.

Note 5 Footway and footpath construction depths will require to be increased where, in the opinion of South Lanarkshire Council, they are liable to be subject to vehicular overrun.

The above notes apply to both tables 5 and 6.

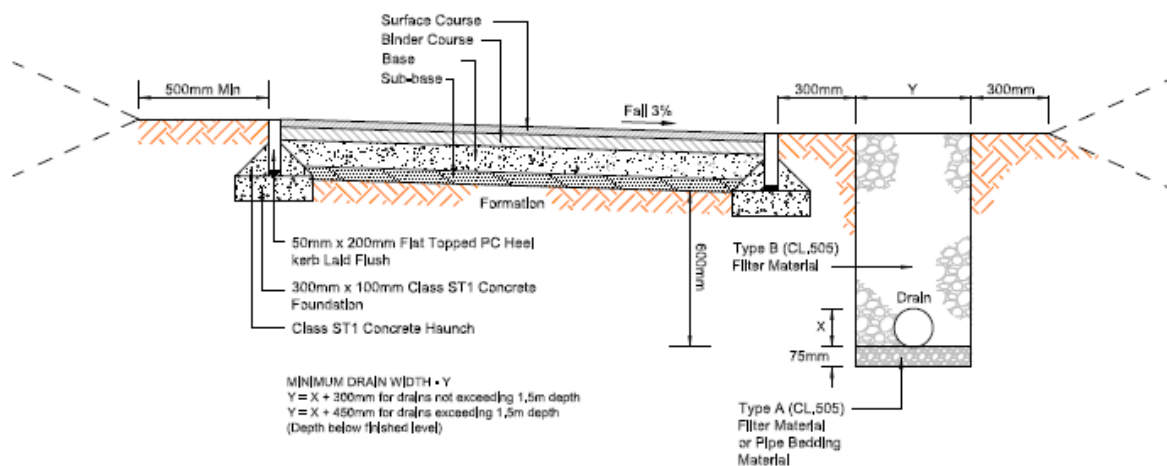


Figure 2 Typical Footpath/Cycle track Construction

Kerbs and Edgings

Materials and Construction

All carriageways, footways and footpaths should be provided with precast concrete kerb or edging. On conventional roads, kerbs should be set 125mm above finished road level, except at pedestrian and vehicular crossings where this dimension is reduced to 10mm. Edging at the heel of footways should be set at 50mm whereas on footpaths it should be set flush with the walking surface. On shared surfaces an upstand of 125mm should normally be provided, except at junctions with footpaths and private accesses where kerbs should be set at 10mm upstand. Approval for the departure from these standards must be sought from South Lanarkshire Council prior to construction commencing.

Remote Areas (i.e. not contiguous with carriageway)

In remote areas, and with the agreement of South Lanarkshire Council, cycleways may be constructed without kerb edgings, where the sub base is laid 500mm wider than the surfacing to provide shoulders.

3.4.8 (a) Driveways and (b) Other Access Details

Replacement

Accesses

Driveways

Vehicular access crossings of the footway for individual dwellings should comply with Figure 1 and be constructed to the footway specification. Maintenance difficulties preclude the use of slab footway construction for vehicle access crossings.

Other Access Details

Where vehicular access, other than to individual dwellings, is taken over a footway, a crossing as detailed in Figures 3 to 5 should be constructed. If the crossing is being built in isolation from other roadworks it is recommended that the block paving specification be adopted. Alternatively, rigid construction may be acceptable but reinforcement may be required where the use of heavy vehicles is expected.

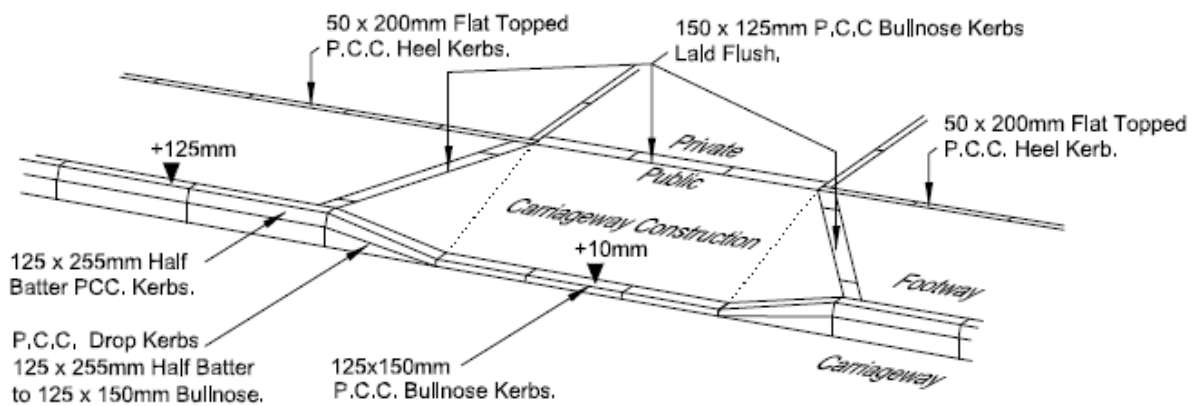


Figure 3 – Single Minor Commercial Access or Car Park of up to 50 Spaces

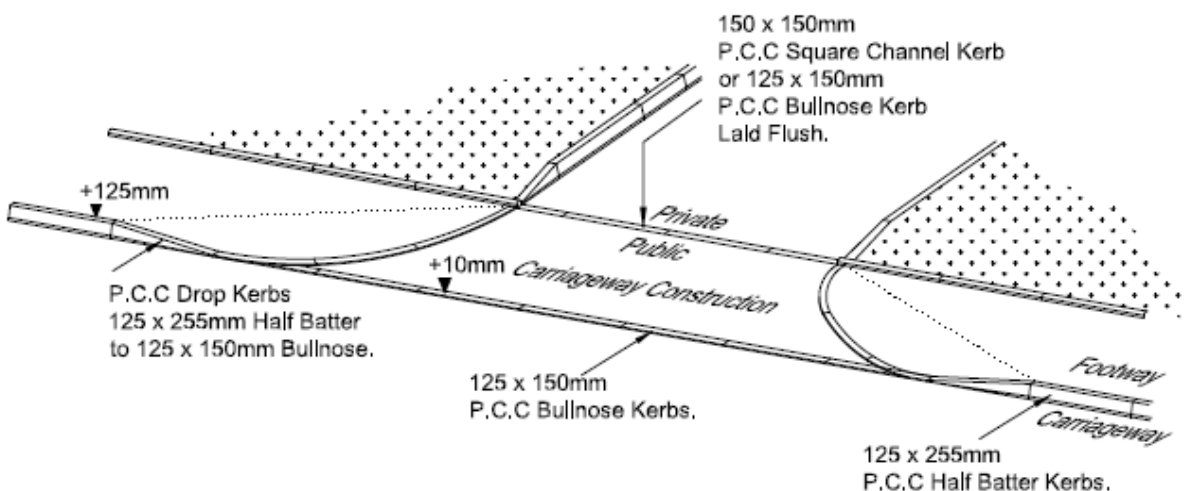


Figure 4 – Minor Commercial Access or Car Park with more than 50 Spaces

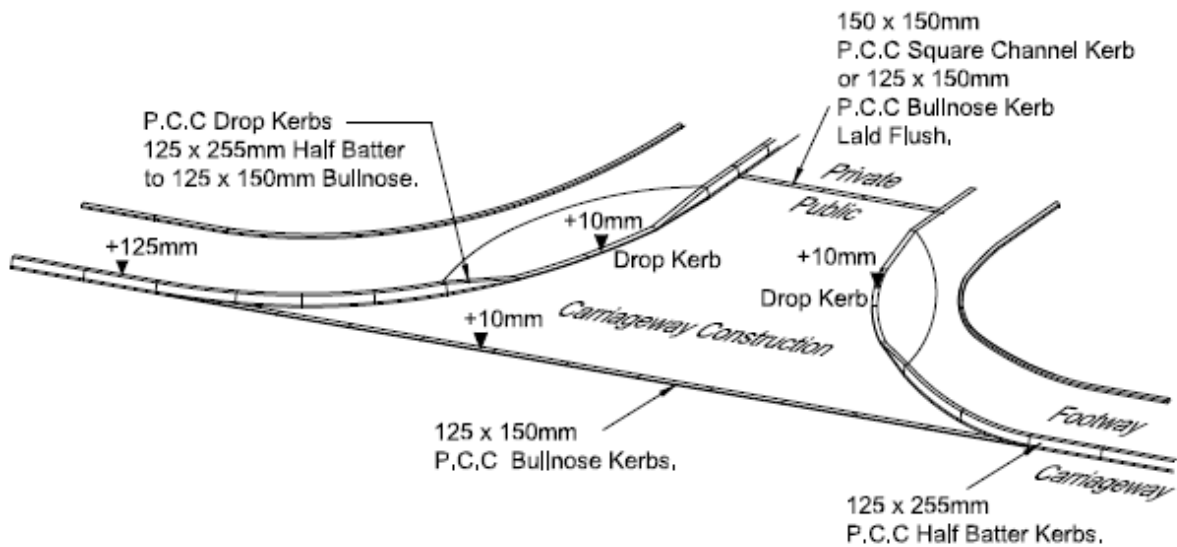


Figure 5 - Major Commercial Access

Page 126

3.4.9 Road Drainage and SUDS

(a) Specification Best Management Practices – Sustainable Urban Drainage Systems

Additional Text

- *Contact South Lanarkshire Council's Flood Risk Management section who will provide on request a copy of the Council's Sustainable Drainage Systems (SUDS) Design Criteria Guidance Note.*

Page 126

3.4.9 Road Drainage and SUDS

(b) Gully Spacing

Advice on these matters should be sought from the Local Roads Authority who should be consulted at an early stage by a developer wishing to carry out a full drainage design.

Additional Text

- *It should be noted that South Lanarkshire Council require double gullies to be installed with independent tails at the low points of any sags, traffic calming features and at turning areas/termination points on the public road.*

Page 131

3.4.10 Landscape Treatment

(a) General Issues

Additional Text

- *It should be noted that South Lanarkshire Council will generally not adopt landscaped areas within development sites. These should be subject to formal factoring arrangements. We will however adopt grass service strips and landscaping associated with SLC adoptable SUDS features.*

Page 134

3.4.11 Lighting Design

(a) Compliance

BS 5489-1 2013 contains guidance and recommendations to support BS EN 13201 and to enable designers of road lighting schemes to comply with it.

Additional Text

- *Contact South Lanarkshire Council's Street Lighting Section for advice on lighting levels, maintenance factors to be used, in conjunction with lighting design calculations, specification of approved materials and L.E.D. luminaire dimming regime.*

Page 134

3.4.11 Lighting Design

(c) Network Manager

Prior to any street lighting design, applications must be made to the Local Roads Authority who will advise on its requirements.

Additional Text

- *Contact South Lanarkshire Council's Street Lighting Section for advice on design and material specification.*

Page 135

3.4.11 Lighting Design

(j) Electrical Design

Road Distribution Circuit

Additional Text

- *Fixed equipment installed as part of the street lighting network, the earth fault loop impedance shall be such that disconnection under fault conditions complies with BS7671 Amendment 3.*

Page 136

3.4.11 Lighting Design

(k) Drawings

All column and distribution pillars shall be numbered to accord with schematic diagrams.

Additional Text

- *All columns shall be aluminium and comply with BS EN40-3-3. Contact South Lanarkshire Council's Street Lighting Section for further advice on the required specification.*

Pages 156-170 inclusive

3.7 Parking Standards for Use Classes

Replacement

- *All references in the parking standards tables to "Vehicle Maximum" should be replaced with "Vehicle Minimum".*

Page 156

3.7 Parking Standards for Use Classes

Replacement

- *Under Shops (Other centre), 3 spaces should be replaced with 5 spaces.*

Page 157

3.7 Parking Standards for Use Classes

Replacement

- *Under Retail Park and DIY Superstore, 2 and 2.2 spaces should be replaced with 4 spaces.*

Page 166

3.7 Parking Standards for Use Classes

Replacement

- *Under Private Sheltered Housing and Housing Associations, 0.2-0.5 spaces should be replaced with 0.5 spaces.*

Page 172

3.10 SUDS Schedule

10. ...overall drainage Design including SUDS.

Additional Text

- *Drainage Design and Flooding Compliance Certificates (Appendices 1-5) require to be completed. Contact South Lanarkshire Council's Flood Risk Management Section for copies of the certificates.*

12. ...that consultant can design SUDS**

Additional Text

- *Drainage Design and Flooding Compliance Certificates (Appendices 1-5) require to be completed. Contact South Lanarkshire Council's Flood Risk Management Section for copies of the certificates.*

13. Identify appropriate Professional Indemnity for the above.

Additional Text

- *See point 6.2 of South Lanarkshire Council's Sustainable Drainage Systems (SUDS) Design Criteria Guidance relating to South Lanarkshire Council's Indemnity requirements. This document is available on request from the Council's Flood Risk Management Section.*

18. Maintenance schedule to include methodology for disposal of SUDS waste, eg silt from ponds, contaminated grass and plant cuttings (arising).

Additional Text

- *Developers must complete the SUDS Maintenance Certificate (Appendix 5) contained within South Lanarkshire Council's Sustainable Drainage Systems (SUDS) Design Criteria Guidance. This document is available on request from the Council's Flood Risk Management Section.*

Page 173

Replacement

- *Final paragraph regarding suite of SCOTS/Scottish Water drawings should be removed as should the diagram opposite. These are no longer valid.*

No further amendments or additions.