The Highland Council
Comhairle na Gàidhealtachd

Roads and Transport Guidelines for New Developments
Stiùiridhean Rathaidean is Còmhdhalach airson Leasachaidhean Ùra

Section 2 – Standards and Guidelines
Earrann 2 – Inbhean is stiùiridhean

Chapter 4
Caibideil 4
Road network
Lìonra rathaidean

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Table 4.1 The Highland Council new road type classification

Section 2 – Standards and guidelines / Earrann 2 – Inbhean is stiùiridhean

Section 2 of the Roads and Transport Guidelines for New Development document sets out the Council's current standards and guidance to assist the design of new road layouts, together with their associated services and facilities, to the standards required by the Council, if the road is to be adopted as public.
The section starts with establishing an appropriate layout, in terms of the intended road type, then provides guidance and requirements on various aspects of detailed design, including parking levels. Guidance on construction details and material standards is also provided.

For lightly trafficked residential streets, reference must be made to the Scottish Government's Designing Streets document, providing design parameters and guidance, which must be taken into account in the design of new or improved streets that serve residential areas.

Section 2 includes the following:

Chapter 4 Road Network

Chapter 5 Design Objectives and Requirements

Chapter 6 Parking

Chapter 7 Construction Materials Standards

Chapter 4 – Road network / Caibideil 4 – Lìonra rathaidean

4.1 Introduction / Ro-ràdh

4.1.1 The Council currently maintains over 6,700km of local public roads throughout the Highland area and there is a wide range of road types, from urban dual carriageways to rural single track accesses. Many of these roads, especially within rural locations, are "life line" routes, often providing the only means of access to a particular settlement. Given the diversity of the Highlands, there is also a wide range of different types of new roads constructed as part of new developments. It should be remembered that the road network is for all types of user and not just the private car.

4.1.2 The design of road layouts is a complex process, due to the number of considerations that need to be taken into account. However, for new development roads, the developer needs to ensure his design takes account of:

- Safety
- Existing conditions – road types, traffic and transport modes
- Integration with existing network
- Accessibility within the development site
- Consideration of all modes of transport – pedestrians, cyclists, public transport and private vehicles, giving appropriate levels of priority
- Servicing requirements
- Environment and amenity

4.1.3 It is not the intention of this document to dictate the exact road layout that must be provided by a developer but there is a requirement to take account of certain standards and recommendations, together with policy and good practice guidance set out in other related documents, in order to produce a layout that fully integrates with the surrounding road network and adjacent areas. It is essential that the road layout is not considered as a separate entity but as a significant part of the overall design proposals for the whole development.

4.1.4 The Council acknowledges there are many existing roads within rural areas that do not comply with the guidance set out within this document. However, there are historical reasons for this situation and, wherever possible, new development roads should

be designed to comply with these current guidelines.

4.1.5 Speed tends to be a primary cause of many road accidents and, therefore, a reduction in speed can reduce the number of accidents occurring, as well as reducing the severity of any resulting casualties. A new road layout should, therefore, seek a design that ensures vehicle speeds are restricted to the appropriate level. For example, roads where there are high levels of pedestrian or cyclist activity should be designed to:

(a) minimise potential conflict between pedestrians/cyclists and motorised vehicles and
(b) reduce the speed of vehicles, in order to address road safety issues. In some circumstances shared surface areas may be acceptable.

4.1.6 Whilst road designs should generally seek to restrict the speed of private vehicles, there may often be the conflicting desire to maintain speeds for public transport vehicles, in order to ensure their journey times remain attractive to users as an alternative to the car.

4.2 Road types / Seòrsachan rathaid

4.2.1 General

4.2.1.1 The road network fulfils a number of functions, ranging from the strategic movement of high volumes of traffic to vehicle access for individual premises and, obviously, these functions are very important. To fulfil these varying functions requires a range of roads with different characteristics. In addition, there are often significant differences in the characteristics of the different road types depending on whether they are located within the urban or rural environment.

4.2.2 The Highland Council Road type classification

4.2.2.1 There is benefit in establishing various road type definitions, in order to clearly differentiate between them, especially for non-residential roads carrying significant volumes of traffic and also for roads in rural locations, where vehicle speeds can be significant. For new roads, the Council has adopted its own road type classification as defined in Table 4.1.

4.2.2.2 When designing a new road or a new network, a developer should identify the main attractors and generators of traffic, both motorised and non-motorised types. The developer should also examine the topography of the

site, including any physical restraints, to establish locations where roads/streets cannot be positioned, due to certain conditions, such as:

- adverse gradients;
- existing trees;
- buildings;
- watercourses; or
- unsuitable ground condition

Table 4.1 The Highland Council new road type classification

Road type	Typical capacity and / or traffic function	Development served	Frontage access +
Strategic route	Connections between primary destinations and to the Trunk Road network.	Main settlements, transport links, and important economic development.	Restricted
Main distributor (urban areas)	Main routes within urban areas typically carrying 5,000 to 20,000 vehicles per day.	Major development areas.	Restricted
Regional route (rural areas)	Transport corridors between settlements.	Links between main and local settlements and links to the Trunk and strategic network.	Restricted
Local distributor (urban areas)	Urban routes linking Main Distributors and carrying up to 5,000 vehicles per day and will be utilised as a bus route.	Up to 1000 dwellings or an industrial estate or mixed development.	May be permitted when speed limit is 30mph and there is provision for vehicle turning within curtilage of properties.
Sub – regional route (rural areas)	Links to the trunk, strategic and regional network.	Larger villages	Restricted
Industrial access road	Designed for HGV traffic and may be utilised as a bus route.	Industrial/commercial premises	Permitted
Main residential street	Provides a link between distributor roads and minor residential streets. May be utilised as a bus route	Up to 200 dwellings	Permitted
Minor residential street	Provides through routes between other residential streets.	Up to 50 dwellings	Permitted
Courtyard, close or cul-de-sac	Access only	Small number of dwellings as agreed with the Council but not exceeding 20	Permitted
Rural link road	Links to the higher route network	Smaller villages	Subject to consideration on a case-by-case basis
Minor rural road	Generally carrying only access traffic	Small settlements and individual properties	Permitted

Notes: Road types shown greyed will not normally be provided by developers but may be financed through developer contributions.
+ Frontage access where permitted is subject to considerations of safety as set out elsewhere in this document

4.3 Descriptions / Tuairisgeulan

4.3.1 Strategic route, main distributor and regional route roads

4.3.1.1 Strategic Route Roads, Main Distributor Roads (urban areas) and Regional Route Roads (rural areas) are significant transport corridors and only in very exceptional circumstances would developers be required to construct such roads themselves; normally there would be a requirement to provide a financial contribution instead. The design of these categories of road would require close liaison and negotiations with the Council, before being accepted.

4.3.2 Local distributor road

4.3.2.1 The function of a Local Distributor Road within the urban area is to keep adjacent areas free from through traffic, whilst forming the connection between Strategic Route and Main Distributor Roads and key local roads, being either Main Residential Streets or Industrial Access Roads. Whilst a Local Distributor Road is primarily intended to meet the needs of local vehicular traffic, it does form a key part of the road network.

4.3.2.2 Direct individual frontage access and on-street parking may be permitted for a Local Distributor Road where a 30mph speed limit is provided. Permitting frontage access would encourage some pedestrian activity and natural surveillance, thereby introducing a sense of place to the road rather than it being a transport corridor giving priority to vehicular traffic; this is particularly true when the road is also a High Street. Where direct frontage access is provided, curtilage turning facilities should be provided to permit a vehicle to enter and exit in forward gear.

4.3.2.3 Areas of new development large enough to require a Local Distributor Road will usually be identified on Local Plans, with an indicative route for such a road either shown on the plans or identified within an associated planning brief for the area. A developer can suggest modifications to any indicative route, in order to optimise development layouts but any change must be approved by the Council.

4.3.3 Industrial access road

4.3.3.1 An Industrial Access Road provides frontage or service access to industrial and commercial premises. This type of road is transitional in nature and the Industrial Access Road can be designed to reduced standards of alignment,

compared with the Local Distributor Road.

4.3.3.2 In general, the Industrial Access Road should be a loop rather than a cul-de-sac, to avoid the need for large turning areas to accommodate long HGVs. Where agreed with the Council, the layout could be designed to accommodate general through traffic movements.

4.3.4 Residential streets

4.3.4.1 Residential streets tend to be transitional in nature, distributing vehicular traffic from a Local Distributor Road (urban areas) or Sub-regional Road (rural areas) to dwellings within residential areas that might be served by a range of minor residential street types.

4.3.4.2 For most residential developments, the Council will encourage the design of the associated residential streets to be based on the guidance set out in Designing Streets**.** It is not intended to re-produce these within this document, other than to highlight that medium to large residential developments should provide more connections onto the external network, to spread vehicular traffic flows and help avoid the need for an internal distributor road.

4.3.4.3 In addition to movement streets also have the following important functions:

- Place
- Access
- Parking
- Services

This means the setting of standard dimensions is usually not appropriate and, therefore, new streets should be considered on a case-by-case basis, taking account of building layout and height, pedestrian and cycle activity, public transport requirements, access by service vehicles, through traffic, design speeds and connections to existing roads.

4.3.5 Home zones

4.3.5.1 Whilst the Council does encourage more use of the Home Zones concept, it should be noted that only the Council can designate a road as a formal Home Zone, under powers granted through the Transport (Scotland) Act 2001 and The Home Zones (Scotland) (No 2) Regulations 2002. A developer would be required to meet the costs of the legal process involved in

establishing a formal Home Zone.

4.3.5.2 Where a developer proposes a Home Zone, early discussions must be held to agree a proposed layout.

4.3.6 Private accesses and roads

4.3.6.1 Up to and including four properties may be served by a private access, over which there is no public right of passage, subject to agreement with the Council. Although private, there is still a requirement for the access to be designed to suitable standards, especially its junction with the public road, and approved by the Council. These standards, together with further guidance, are set out in the Access to Single Houses and Small Housing Developments.

4.3.6.2 With regard to the formation of a new private access or private road in a rural area it is preferable, in the interests of road safety, that it link onto a side road rather than the main public road. The Council also wishes to encourage the use of shared private access where possible. Provision of an additional separate pedestrian/cycle route from the site linked to the main public road may sometimes be desirable in certain situations.

4.3.6.3 A private road is defined as a road over which public access can be permitted but which is unadopted by the Council. A private road shall be designed to suitable standards, approved by the Council.

4.3.6.4 In both circumstances, the owner(s) of a private access or road is responsible for its maintenance.

4.3.7 Roads in rural areas

4.3.7.1 Developments in rural areas are considered differently from the urban situation, as higher vehicle speeds require more stringent design criteria and reference should also be made to the Design Manual for Roads and Bridges (DMRB). In addition, there is a need for appropriate aesthetic design of rural developments to ensure that they sit comfortably into their surrounding settings.

4.3.7.2 Rural roads are often subject to speed limits in excess of 30mph and it is vital, therefore, that appropriate visibility is provided, even for small developments or where traffic flows on the main road are relatively low.



4.3.7.3 In addition, whilst the different types of residential streets used in rural areas will essentially remain the same as for urban areas, it is unlikely that many rural residential developments will be of such a size as to require a Main Residential Street that acts as a core road. An additional type of road will be permitted, namely the single track access road, which can be used to serve small rural developments. Design standards are set out in Chapter 5.

4.4 Pedestrian and cycle networks / Lìonraidhean choisichean is bhaidhsagalan

4.4.1 The Council encourages walking and cycling as they are the most sustainable modes of travel and should be the first choice for many short trips. Pedestrian and cyclist movements should be made as safe, convenient and attractive as possible and effective walking and cycle accessibility and connectivity must be integral to the development layout at the earliest planning stage.

4.4.2 Pedestrians, cyclists and vehicles should share street routes wherever possible. However, the pedestrian and cycle networks should reflect natural desire lines to main trip generators, whilst taking account of aspects such as connections to Core Paths and leisure activities and, as a result, there may be occasions when more direct segregated routes are appropriate.

4.4.3 The number and type of walking and cycling trips generated by a development – to and from work, shops, schools, bus stops, health centres, and recreational facilities – will result in a hierarchy of pedestrian and cycle routes complementary to the vehicular network. The volume of pedestrian and cyclist activity will also influence the width of facilities and the need for features, as well as the requirement for formal crossings

4.4.4 Cycle networks can comprise Shared Road Links, Cycle Lane Links or Cycle Track Links. The appropriateness of each facility is described in more detail within Cycling by Design. The Council should be consulted as early as possible about existing cycle route links and the need for new ones.

4.5 Bus network / Lìonra bhusaichean

4.5.1 For many trips, especially over medium to long distances, public transport is likely to be the only realistic alternative to travelling by private car for the majority of people. It is also likely that buses will form the main type of

public transport provision.

4.5.2 For new developments, accessibility and connectivity are key issues that will significantly influence the use of public transport. The Council will require developers to maximise opportunities for enhancing public transport facilities serving a development, especially the bus network.

4.5.3 In planning new developments, the need to provide or enhance local bus services will have a significant impact on the design, in terms of road layouts, widths, corner radii and pedestrian routes. In order to be as attractive as possible, bus routes must be reasonably fast and direct, connecting the centres of the residential, business and shopping areas they serve.

4.5.4 The relationship of new residential development to any road used as a bus route should result in no house being more than a 400-metre walk from the nearest bus stop. This means the existing bus network needs to be assessed to establish how well the development proposal meet this criterion and establish what measures are needed to address any shortcoming.

4.5.5 For residential developments where buses do not pass through the site, it is important that a high-quality pedestrian network is provided giving direct access to nearby bus stops, with minimal walking distances. In such instances, the provision of footpaths may be appropriate if the internal road layout does not provide direct routes for pedestrians.

4.5.6 For non-residential developments generating significant levels of trips by the public, such as a large retail store, it is desirable that bus services can provide good accessibility. As a result, it would be expected that the internal design of such developments shall permit bus services to enter the site and drop off and pick up passengers close to a building's main entrance, with provision of shelters and covered walkways, where possible.

4.5.7 If extensive measures that seek to aid buses and, therefore, encourage travel by public transport, are already in existence in the surrounding area or are planned, it is important to ensure the benefits from these measures are not eroded by the provision of poor facilities in new residential areas.

4.5.8 Mutual benefit can be obtained from regular informal contact between the developer, the Council's Public Transport Manager and relevant bus operators. This will allow the implications of those developments requiring bus service provision and bus routes to be identified at an early stage, so

that bus operation can commence as soon as a development opens, thereby encouraging the maximum use of public transport. It is important that the developer seeks guidance from the Public Transport Manager during the pre-planning application stage.

4.5.9 In considering enhancements or alterations to the existing bus network, the developer needs to consider the following aspects:

- Trip attraction levels and service provision
- Accessibility
- Walking distances
- Infrastructure requirements
- Bus stop features and turning requirements
- Road widths
- Bus priority
- Information provision, including Real-Time Passenger Information (RTPI) More details are provided within Chapter 5.