Fife Council Transportation Development Guidelines

Supplementary "Designing Streets" Guidance

Introduction

This supplementary guidance provides advice, in addition to that contained within the Fife Council Transportation Guidelines, to assist designers in the delivery of successful places that are distinctive; safe and pleasant; easy to get to and move around; welcoming; adaptable and resource efficient. The supplementary guidance will assist designers in complying with current Scottish Government policies SPP17 Planning for Transport, PAN76 New Residential Streets, the Fife Urban Design Guide, the Fife Masterplans Handbook and the draft “Designing Streets” document.

According to the current Fife Council Transportation Development Guidelines developments of up to 200 dwellings can be served by a single point of vehicular access with the existing public road network. However, SPP17 Planning for Transport requires new development sites to be fully accessible to all modes of transport. In addition, PAN76 New Residential Streets recommends that the design of new housing developments shall avoid the use of long cul-de-sacs with a single point of vehicular access from the existing road network. Instead PAN76 recommends that housing layouts should be designed with a grid type road pattern with multiple points of vehicular access with the surrounding road network, including road links to existing adjoining developments. Transportation Services fully supports the advice given in SPP17 and PAN76 and expects this approach to be adopted by designers in all new development layouts.

Once the draft Scottish Government “Designing Streets” is adopted, a full revision of the current Fife Council Transportation Guidelines will be carried out.

1. Layout and Connectivity

   1.1 Multiple points of vehicular and pedestrian access with the surrounding public road network shall be provided.
   1.2 The use of cul-de-sacs shall be avoided. However, the use of short cul-de-sacs serving a small number of units may be acceptable, subject to site constraints.
   1.3 All remote footpath/cyclepaths shall be overlooked by property frontages. Both ends of a remote footpath shall be intervisible.

2. Quality Places

   2.1 Parking provision for housing located within parking courts to the rear of properties is acceptable (figure 1).
   2.2 The use of cross-roads junctions with reduced radii and raised tables is acceptable.
   2.3 The use of car free streets is acceptable.
   2.4 The provision of public squares where a number of roads meet is acceptable.
   2.5 Direct vehicular access to houses fronting distributor roads is acceptable, subject to the distributor road having a design speed of no greater than 30mph and a weekday two-way traffic flow no greater than 10,000.
3. Street Users Needs

3.1 Grid type street layouts shall be provided.
3.2 The form of the street layout will influence the size and shape of the building blocks (or vice-versa) – the building blocks can be in any form of loose grid or geometrical shape.
3.3 Maximum 400 metres (measured along the walking route) walking distance between front door of residential property and closest bus stop.
3.4 Maximum 800 metres (measured along the walking route) walking distance between front door of residential property and local centre.

4. Street Geometry

Design Speed – 10mph on shared surface roads and private parking courts.
20mph on housing roads
30mph on distributor roads
Statutory Limits – 20mph on housing roads
30mph on distributor roads
Junction Spacing – The provision of crossroad junctions is acceptable. The advice given in Table 5.3 of the Transportation Development Guidelines (minimum 40 metres for a housing road) may be relaxed to a lesser junction spacing, subject to individual site circumstances.
Junction Geometry – 90° ± 10°
Junction radii – 2 metres at junctions of housing road/shared surface road/housing court with housing road.
4.5 metres at junctions of housing roads with distributor roads.
Horizontal Radius – A minimum radius is not specified. The designer shall ensure with swept paths that a refuse vehicle can safely negotiate the proposed layout.
Vertical Gradient – Minimum of 1% on all roads
Maximum of 7% on shared surface roads and private parking courts.
Maximum of 8% on housing roads
Maximum of 6% on distributor roads
Carriageway Width – 4.5 metres on shared surface roads
5.0 – 6.7 metres on housing roads. Wider roads will be acceptable in order to accommodate on street parking. Narrower roads, a minimum of 3.5 metres, will be acceptable over short lengths.
6.0 – 7.3 metres on distributor roads. Minimum of 6.0 metres for bus routes.
Footways – 2.0 metres wide on both sides of the carriageway, except on shared surface roads where 2 metres wide grass service strips shall be provided on both sides of the carriageway.
3.0 metres wide on shared footway/cycleways.
Forward Visibility – Maximum of 70 metres within all housing areas. Forward visibility shall be restricted with the careful positioning of buildings, landscaping etc, rather than the use of physical traffic calming measures (eg. speed cushions). A maximum length of 70 metres of straight carriageway shall be provided within a grid street layout.
Minimum of 30 metres on 30mph road.
Minimum of 20 metres on 20mph road.
Minimum of 15 metres on 10mph road/parking court.
Junction Visibility –

2.0 metres x 30 metres at junctions of vehicular access serving 1 – 4 houses and shared surface roads and housing roads.
2.4 metres x 40 metres at junctions of housing road/shared surface road/housing court with housing roads.
2.4 metres x 60 metres at junctions of housing roads with distributor roads subject to a 30mph limit.
4.5 metres x 60/90* metres at junctions of housing roads with classified distributor roads subject to a 30mph limit.

*If two-way traffic on main road exceeds 10,000 per day.

The y-distance shall be measured to the nearside channel line. However, if vehicles approaching from the left are physically segregated from the opposing flow then the y-distance can be measured to the centreline of the main road.

Visibility in the vertical plane shall also be checked to ensure that views in the horizontal plane are not affected, for example by the crest of a hill, dip in the road or bridge abutment. Eye height is generally taken at 1.05 metres. Drivers shall see all obstacles between 600mm (small child) and 2 metres in height within the required visibility splay. (This applies to both forward and junction visibility).

5. Parking

5.1 Parking for houses and flats shall be in accordance with the Parking Standards within the Fife Council Transportation Development Guidelines.

5.2 Within a proposed development, it is acceptable for 25% of the total number of units to utilise road space to provide 1 of the required parking spaces per unit on-street. The 25% figure may be increased, subject to site circumstances and the proposed layout. However, these spaces cannot be allocated and are for general use. For example –

- In a proposed development of 20 three and 40 four bedroom houses, it will be acceptable for -
  - 5 of the 20 three bedroom houses to each have 1 in-curtilage parking space with 1 parking space being provided on-street (rather than 2 in-curtilage spaces), and
  - 10 of the 40 four bedroom houses to each have 2 in-curtilage parking spaces with 1 parking space being provided on street (rather than 3 in-curtilage spaces).
- The houses shall be spread evenly throughout the development layout.

5.3 Visitor parking shall be in accordance with the Fife Council Transportation Development Guidelines. However, the visitor spaces can be provided on-street with the use of varying road widths, rather than formal laybys.

5.4 Shared covered and secure cycle parking facilities shall be provided for flatted developments (for example – beneath stairwells).

5.5 Courtyard parking to rear of properties is acceptable. Properties served by courtyard parking must have direct access to the courtyard.

5.6 Undercroft/underground parking shall be considered and encouraged for flatted/office developments.

6. Materials, Adoption and Maintenance

6.1 The use of surfacing materials other than those specified within the Transportation Development Guidelines may be considered acceptable, subject to the materials being
easy to maintain; safe for purpose; durable; sustainable and appropriate to the context. Transportation Services may request developers to provide an additional supply of the materials used in a development, to ensure the long-term maintenance of novel road construction, subject to storage space being available.

6.2 The use of trees and landscaping within the road boundary (e.g. to limit forward visibility or denote on-street parking spaces) may be considered acceptable, subject to suitable planting arrangements (e.g. tree pits, avoidance of Public Utility plant) being in place. Soft landscaping and trees adjacent to streets will not generally be considered for addition to the List of Public Roads.

6.3 Distributor roads, housing roads, shared surface roads and their associated footways, verges, service strips, supporting retaining walls and embankments and street lighting will be considered for addition to the List of Public Roads.

6.4 Link footpaths and footpath/cyclepaths will be considered for addition to the List of Public Roads.

6.5 Parking courts will not be considered for addition to the List of Public Roads.

6.6 Art features will not be considered for addition to the List of Public Roads.

6.7 Separate maintenance arrangements shall be provided for areas and features not being added to the List of Public Roads.

7. Traffic Signs and Road Markings

7.1 The creation of street clutter by the over-provision of sign posts, lighting columns and unnecessary road markings shall be avoided.

7.2 Street nameplates shall be located in prominent positions and be provided prior to the first house being occupied within the street. Street nameplates mounted on buildings or boundary walls is preferable to street nameplates mounted on posts in the footway.

7.3 The use of advance direction signs shall be avoided. The provision of landmark buildings or features within housing developments will make the sites easy to move around in.

7.4 Centre line road markings shall be omitted from all housing roads and shared surface roads.

7.5 Give-way markings shall be omitted from all junctions within housing layouts.

7.6 Give-way markings (omitting the triangle marking and give-way sign) shall be provided on junctions with distributor roads.

7.7 On-street parking bays shall be denoted with contrasting surfacing finishes, concrete blocks, build-outs, variable road widths, aluminium road studs, trees, landscaping, etc. in preference to the use of road markings.

7.8 Following substantial completion of the streets, during the maintenance period, Transportation Services will monitor the operation of the streets. The developer will be required to provide additional, or remove existing, signing and lining if deemed necessary by Transportation Services, prior to the streets being added to the List of Public Roads.

8. Street Furniture, Street Lighting and Art Features

8.1 The street lighting shall be planned as an integral part of the street layout design, rather than at the end of the design process.

8.2 Wall mounted street lighting is preferable to the use of street lighting columns, subject to acceptable maintenance access arrangements being in place.

8.3 Any warning signs that are required shall be mounted on street lighting columns, rather than on separate posts.

8.4 Street furniture (seating, litter bins, art features, etc) shall be positioned in a manner that does not restrict the minimum footway width.
9. "Home Zones"

9.1 The Fife Council Transportation Development Guidelines does not give guidance on the design of Home Zones. Home Zones are public spaces between buildings that are designed to allow people and vehicles to share them on equal terms. Motorists should feel that they are guests when entering a Home Zone environment designed for people to walk and play. Successful Home Zones are typically provided within existing housing areas with community involvement and support.

9.2 The Home Zones (Scotland) (No 2) Regulations 2002, define a series of steps that local authorities must follow during the creation of a Home Zone. The Regulations allow statutory speed limits of 10mph. Further advice is available within the Scottish Government Home Zones Guidance Consultation (August 2002) and the Institute of Highway Incorporated Engineers Home Zone Design Guidelines (June 2002). The Regulations and Guidance will have to be followed by Developers and designers who wish to promote a Home Zone development.

9.3 Given that community involvement and support is essential, it is difficult to design successful new-build Home Zones. Incoming residents may not be fully aware of the environment they are moving into. The road layout alone cannot deliver a successful Home Zone.

9.4 Housing layouts designed in accordance with the advice given in paragraphs 1 – 8 above will provide novel road layouts that incorporate Home Zone elements, but will not be designated as Home Zones. Housing layouts designed without any community involvement cannot be designated as Home Zones.

MB/Supplementary Guidance
Approved by Fife Council Environment, Enterprise & Transportation Committee
16 April 2009
Figure 1 – Parking Courtyard
(extract from “Car Parking – What Works Where”)