

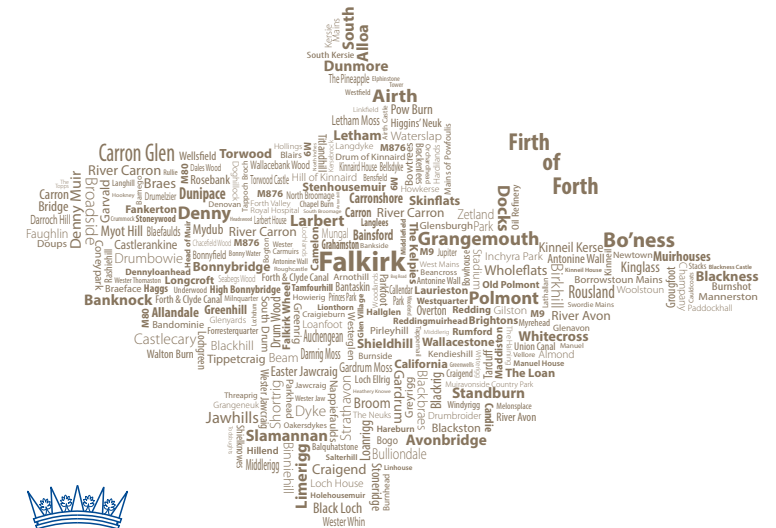
Neighbourhood Design

Supplementary Guidance SG02

November 2020



Falkirk Council



Supplementary Guidance

A suite of 14 supplementary guidance notes (SG's) is currently being produced by the Council in conjunction with LDP2. The number of SGs is reducing from seventeen to fourteen, as three of the adopted SGs are being consolidated to provide a more comprehensive and integrated approach to guidance. The SGs seek to provide more detailed guidance on how particular local development plan policies should be applied in practice.

These SGs form a statutory supplement to LDP2, and are intended to expand upon planning policies and proposals contained in the proposed plan.

A full list of the supplementary guidance in this series is found below.

-  **Development in the Countryside**
-  **Neighbourhood Design**
-  **Residential Extension and Alterations**
-  **Shopfronts**
-  **Green Infrastructure and New Development**
-  **Affordable Housing**
-  **Biodiversity and Development**
-  **Local Nature Conservation and Geodiversity Sites**
-  **Landscape Character Assessment and Landscape Designations**
-  **Trees and Development**
-  **Frontiers of the Roman Empire (Antonine Wall) World Heritage Sites**
-  **Listed Buildings and Unlisted Properties in Conservations Areas**
-  **Developer Contributions**
-  **Renewable and Low Carbon Energy**

Neighbourhood Design

1. Introduction

The purpose of this guidance and how it is meant to be used.

2. Policy Framework

How this guidance relates to other policy and guidance on streets and design.

3. Process in Falkirk Council

How we expect the design process to align with the planning and roads consenting processes to ensure good integrated design and efficient processing of applications.

4. Our Places and Streets : Analysing What Works

An analysis of typical streets and neighbourhoods in our area against the Scottish Government's placemaking and street guidance to understand what makes our area distinctive and what we can learn from this in designing new neighbourhoods.

Urban High Street - Bo'ness Town Centre

Formal Grid - Grahamston

Informal Grid - Arnothill and Dollar Park

Waterside - Camelon

Village Green - Dunmore

Contemporary Suburb 1 - Kinnaird

Contemporary Suburb 2 - The Drum, Bo'ness

5. Design Guidance

General design principles and examples illustrating these principles for the different aspects of neighbourhood design, based broadly on the street design hierarchy in the Government's 'Designing Streets' policy document.

Street Structure :

Context and Character

Permeability and Legibility

Green and Blue Infrastructure

Buildings and Spaces

Street Layout :

Achieving Appropriate Traffic Speed

Junction Types and Arrangements

Streets for People

Integrated Parking

Emergency and Service Vehicles

Street Detail :

Drainage

Utilities

Planting

Materials

Reducing Clutter

6. Design Principles Checklist and The Place Standard

1. Introduction

What is the purpose of the guidance?

- 1.1 The Falkirk Local Development Plan (LDP) 2 sets out the following vision for the Falkirk area :
“The place to be: a dynamic and distinctive area at the heart of Central Scotland characterised by a network of thriving communities set within high quality greenspaces, and a growing economy which is of strategic importance in the national context, providing an attractive, inclusive and sustainable place in which to live, work, visit and invest.”
- 1.2 To deliver this vision, the Local Development Plan (LDP) 2 includes aspirations for the continued transformation and regeneration of the area with a target of 9000 new homes to be built over the period 2020 - 2040.
- 1.3 Developing the Falkirk area as a good place to live and work is central to the Spatial Strategy of LDP2; it follows, therefore, that the principles of good placemaking will apply to all new development and all areas.
- 1.4 This supplementary guidance supports the vision by setting out aspirations for the design of new residential neighbourhoods within the Falkirk Council area. The Council expects new development to meet the highest standards of design through the delivery of good buildings and places to enhance quality of life. Development should address the **six qualities of successful places** identified in The Scottish Government’s Scottish Planning Policy:
 - Distinctive;
 - Safe and pleasant;
 - Easy to move around,
 - Welcoming;
 - Adaptable and
 - Resource efficient.

The guidance reflects this approach to promoting principles of successful place making.

How does it relate to Designing Streets?

- 1.5 ‘**Designing Streets**’ is the national policy on street design which was published in 2010, and sits alongside Scottish Planning Policy. It marks a significant shift in policy, stressing that **the place function of streets should be considered before their movement function**. It should be noted that the National Roads Development Guide is the enabling document for Designing Streets; accordingly the two documents should be read together.
 - 1.6 This Supplementary Guidance seeks to reflect the principles contained in ‘Designing Streets’. The street design hierarchy in Designing Streets has been used extensively as a means of structuring the document. The intention is not to replicate ‘Designing Streets’ but to show how it relates to the Falkirk area. In essence, this Supplementary Guidance demonstrates how national and local policy on urban design can be applied in the Falkirk area.
- ### How does it relate to Historic Environment Policy for Scotland 2019?
- 1.7 This Supplementary Guidance seeks to reflect the principles contained in Historic Environment Policy for Scotland (HEPS, 2019) in relation to the role that the historic environment plays in place making.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists
Connections to Wider Networks
Connections Within a Place
Block Structure

Walkable Neighbourhoods
Public Transport

Context and Character
Orientation

Street Layout

Achieving Appropriate
Traffic Speed

Junction Types
and Arrangements

Streets for People
Integrating Parking

Emergency and
Service Vehicles

Street Detail

Drainage

Utilities

Planting

Materials

Reducing
Clutter

1. Introduction

What is contained in the guidance?

- 1.7 The guidance expands upon key design policies contained within the Local Development Plan, by:
- Highlighting the national and local **policy framework** which provides the context for urban and street design;
 - Setting out the **process in the Falkirk Council area** which designers should follow and how this links into the statutory planning and roads consent processes, including advice on pre-application consultation and front loading of information at pre-submission stages;
 - Providing an **analysis of our places and streets** as an insight into the key urban qualities of a range of successful local places and streets that can be achieved through applying appropriate urban design principles. This can be used as a local reference point for good placemaking.
 - Providing **design guidance** on site planning, street structure, street layout and street detail, to reflect the terms of reference of Designing Streets. The guidance set out key principles, illustrating them with examples from the local area to demonstrate ways of designing successfully.
- 1.8 Through this approach, developers and others are expected to reflect the best qualities of local character and distinctiveness in the design of new residential neighbourhoods and in any retrofitting and urban realm projects.

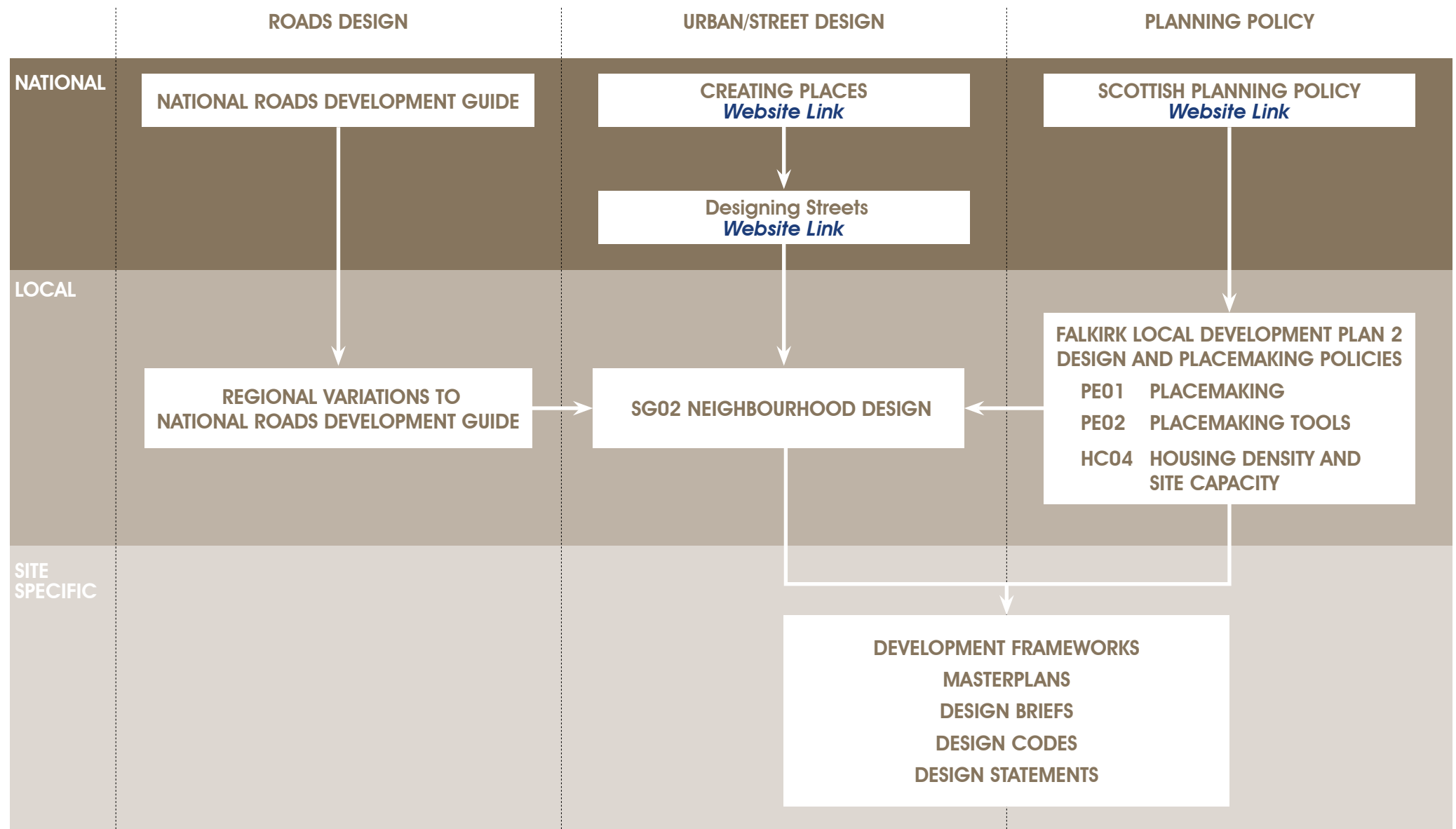
Where does the guidance apply?

- 1.9 This guidance applies to the design of all new neighbourhoods, whether as part of new settlements, urban and village extensions or urban regeneration sites. It applies at all scales from large greenfield releases to small infill sites, as well as to public realm enhancement schemes and improvement schemes in existing neighbourhoods. Whilst it is primarily intended for residential development, the principles are also applicable to mixed use neighbourhoods including business, commercial and community uses.

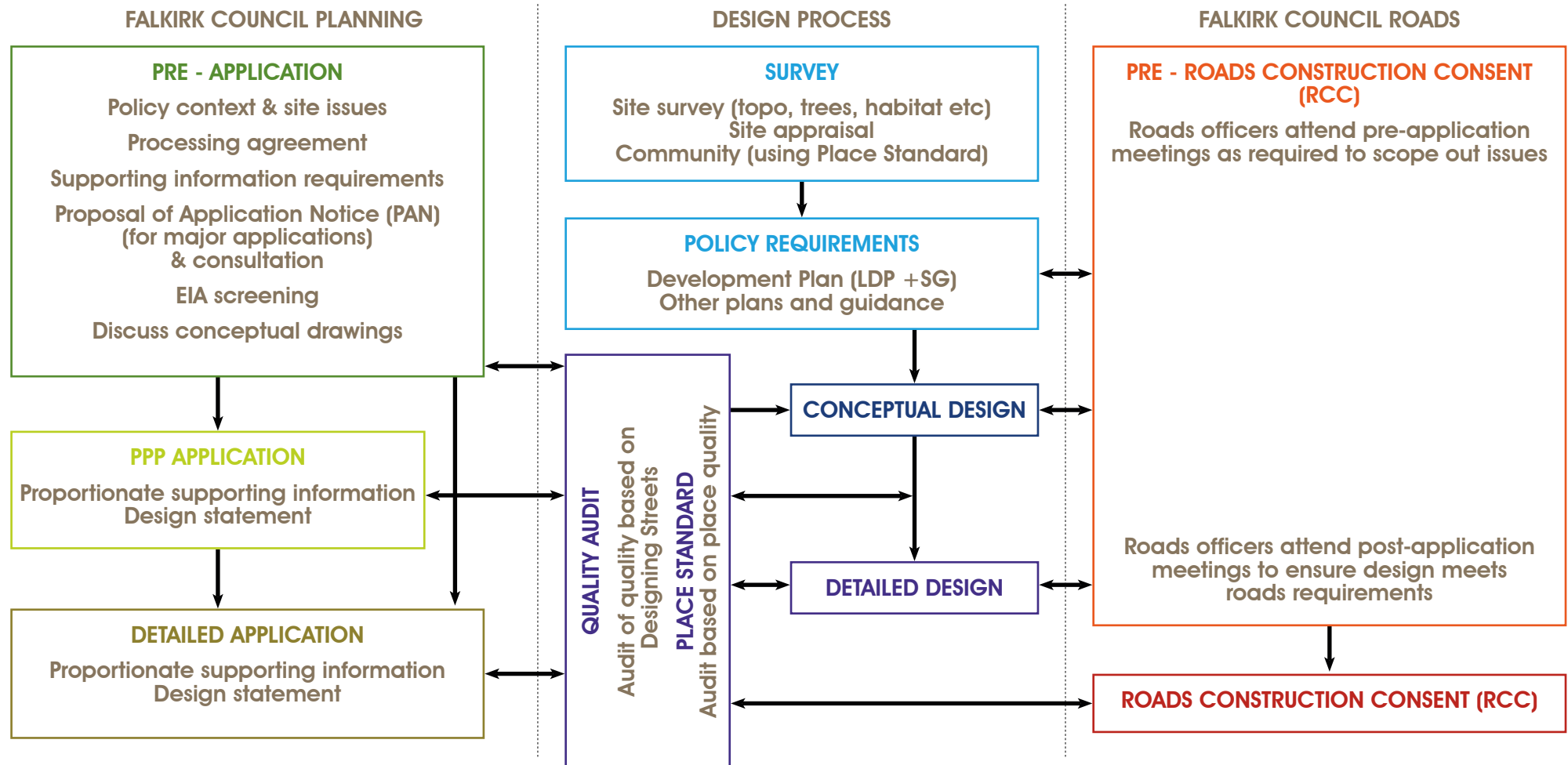
What status does it have?

- 1.10 As statutory supplementary guidance, it is a part of the development plan, and a primary consideration in the determination of planning applications.

2. Policy Framework



3. Process in Falkirk Council



Key Principles

- Engage in pre-application discussions as early as possible;
- Apply the quality audit at each significant stage in the design process;
- Use the Place Standard as a survey and assessment tool;
- Front load consultation to assist smooth processing of application;
- Integration of planning and RCC processes, with roads officers involved throughout planning stage to avoid significant redesign at RCC Stage.

4. Our Places and Streets: Analysing What Works

Figure 1: Extent of Local Authority Area



4. Our Places and Streets: Analysing What Works



4. Our Places and Streets: Urban High Street - Bo'ness Town Centre

Qualities of Successful Places - Bo'ness Town Centre

Bo'ness is a historic port and burgh town dating back to Roman times. The urban form of the historic core displays many qualities of successful urban places that can be applied to the layout and detailed design of new neighbourhoods and urban retrofitting projects within the greater Falkirk Council area.

Distinctive ✓

Narrow streets, closes and lanes of the historic core, interspersed with squares, create distinctive and attractive spaces. Landmark buildings on corners aid navigation and provide interest. The potential to create closer links to the waterside setting has not been exploited to date.

Safe and Pleasant ✓

Road geometries reduce speed and squares, closes and lanes provide surveillance and attractive places to walk and spend time with others.

Easy to Move Around ✓

Streets are easy to move around and connect well to surrounding movement networks.

Welcoming ✓

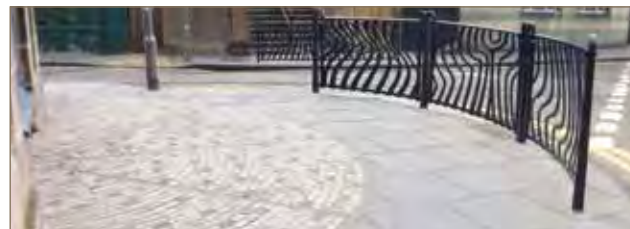
Street layout provides shops, social and other cultural uses within walkable access and friendly gathering spaces.

Adaptable ✓

The historic buildings have endured over time to be adapted successfully to other uses, to suit changes in society and the environment.

Resource Efficient ✓

Materials are durable and pleasing to the eye and a common palette creates uniformity in appearance and character.



4. Our Places and Streets: Urban High Street - Bo'ness Town Centre

Analysis

Street design and layout within the historic core creates a pleasant walking experience through a combination of pedestrian and cycle friendly features and traditional movement patterns.

The street pattern within the town centre is well connected to the surrounding road networks, providing a flexible choice of travel options and ease of movement through the town.

Housing, employment, retail and other social facilities are located within easy walking distance of each other.

Narrow streets, closes and lanes within the historic core, interspersed with squares, create distinctive spaces and interesting and variable routes ensuring good orientation and easy navigation through the area.

A wide range of facilities can be accessed on foot from residential areas with good links to public transport for outlying settlements.

Public transport on the principal streets provides strong connections to local networks.

The town centre accommodates a vibrant range of building type, architectural character and style within an integrated urban structure.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists

Connections to Wider Networks

Connections Within a Place

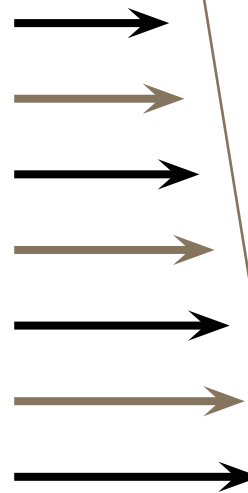
Block Structure

Walkable Neighbourhoods

Public Transport

Context and Character

Orientation



Public Transport



Context and Character



Pedestrians and Cyclists



Block Structure

4. Our Places and Streets: Informal Grid - Arnothill & Dollar Park

Qualities of Successful Places - Arnothill & Dollar Park

The Antonine Wall, built along the ridge of Arnothill, provided the template for the Victorian street pattern of Arnothill, where the town's burghers built their handsome stone villas. Typical plots feature extensive garden grounds enhanced by mature trees. The image of leafy Victorian villas on the hill is balanced by the open green space of Dollar Park. Many of these features are indicative of qualities of successful places, and can be applied to both new and retrofit development to create distinctive and attractive neighbourhoods.

Distinctive ✓

Impressive late Victorian sandstone villas with extensive garden grounds and stone boundary walls, mature tree cover and formal landscaping. The elevated position provides an excellent outlook and gave early housebuilders the opportunity to create visible landmarks.

Safe and Pleasant ✓

Open space and mature landscaping creates a safe and attractive place. Well connected path links aid pedestrian and cyclist movement with narrow lanes adding interest and helping reduce vehicle speeds.

Easy to Move Around ✓

Good connectivity for all modes of movement, particularly pedestrians and cyclists. Narrow lanes and junctions provide a safe environment for pedestrians and cyclists accessing nearby community facilities.

Welcoming ✓

The street layout provides opportunities for residents and visitors to walk to local community facilities but there are limited opportunities for social interaction.

Adaptable ✓

There has been some small-scale infill development within the landscaped informal grid layout.

Resource Efficient ✓

Mature landscaping and street trees integrate natural landscape features into the streetscape. Alongside this, the use of traditional and durable building materials such as blonde sandstone, natural slates, setts, cobbles and stone slabs has helped create a distinctive and attractive setting of great character.



4. Our Places and Streets: Informal Grid - Arnothill & Dollar Park

Analysis

Narrow lanes provide good connecting routes for pedestrians and cyclists. However, high boundary walls mean that these are not particularly well over-looked by neighbouring houses which can make users feel less secure.

The street network is reasonably well connected with the surrounding area.

The area is dominated by residential use, though a wide range of social and retail facilities are available in nearby Falkirk Town Centre.

The irregular arrangement of streets responds to the varied topography; villas on higher ground benefit from vistas of the park to the north.

Facilities within the Town Centre are within easy walking distance.

The area is well serviced by buses, and there are 2 train stations within walking distance.

Victorian sandstone villas, boundary walls, mature trees and landscaping provide distinctive character.

The east - west axis of the Antonine Wall set the footprint for the pattern of streets; many properties, in the larger southern section of the area in particular, present main elevations to the north with only gardens and rear elevations benefitting from solar gain.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists

Connections to Wider Networks

Connections Within a Place

Block Structure

Walkable Neighbourhoods

Public Transport

Context and Character

Orientation



4. Our Places and Streets: Formal “Grid” - Grahamston

Qualities of Successful Places - Grahamston

Grahamston is a mixed use settlement adjacent to the town centre of Falkirk. Its historic development dates back to the nineteenth century when the railway and canal network brought industry and prosperity to the burgeoning town. The settlement pattern demonstrates qualities of successful urban places that can be applied to the layout and detailed design of new neighbourhoods and urban retrofitting projects within the greater Falkirk Council area.

Distinctive ✓

The regular grid pattern of narrow streets and lanes lined with traditional cottages and villas creates distinctive historic character.

Safe and Pleasant ✓

Narrow streets and tight radius corners at crossroads reduce traffic speeds.

Welcoming ✗

The formal grid fails to provide spaces for socialising - the grid needs to be relaxed in places with building footprints staggered to enable communal open spaces to be provided.

Adaptable ✗

Although the traditional buildings have endured to be adapted to other uses over time, there are issues in relation to the lack of provision for car parking in the historic street layout; the visual and physical impact of cars on streets detracts from the quality of the place.

Resource Efficient ✓

Traditional materials and features are easily maintained as they are more durable; they add quality and visual interest.



4. Our Places and Streets: Formal "Grid" - Grahamston

Analysis

The street layout allows for pedestrian friendly crossings at junctions within the geometric grid pattern. Small corner radii to pavement crossings slow traffic speed and maintain pedestrian desire lines.

The grid pattern of streets creates a permeable layout which is well connected to surrounding movement networks.

Some non - residential uses remain in the area and a wide range of social and retail facilities offered by Falkirk Town Centre are nearby.

The formal orthogonal geometry of the grid has created a regular but distinctive urban pattern.

A wide range of facilities can be accessed on foot with good links to public transport.

The area sits immediately adjacent to a main line railway station and benefits from proximity to the full range of transport offered by the town centre.

Terraced villas and cottages set out in in regular rows have created a place of distinctive character - new development should respond to the established design coding.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists

Connections to Wider Networks

Connections Within a Place

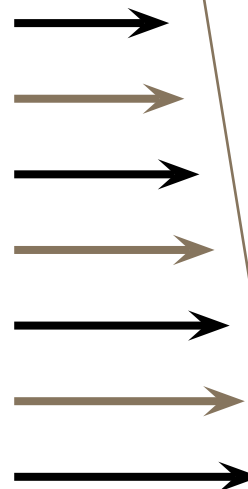
Block Structure

Walkable Neighbourhoods

Public Transport

Context and Character

Orientation



4. Our Places and Streets: Waterside - Camelon

Qualities of Successful Places - Camelon

Rosebank Distillery and Lock 16 in Camelon, on the Forth & Clyde canal, represent 2 key areas of waterfront development in the Falkirk area. The distinctive character of both Rosebank and Lock 16 is defined by 18th and 19th century industrial development brought about by the cutting of the canal. The features found in these locations demonstrate many qualities of successful urban places which can be applied to new development in the area to help create new neighbourhoods with distinctive character.

Distinctive ✓

The Forth & Clyde Canal and the historic buildings associated with it create a place with distinctive character. Traditional street frontages together with a number of landmark buildings overlooking the Forth & Clyde Canal create focal points and add interest within the area.

Safe and Pleasant ✓

An open outlook to the canal and towpaths create a pleasant feel. The towpaths offer opportunities for walking and cycling; as they are overlooked by neighbouring properties, the towpaths feel safe and welcoming, which encourages greater use by pedestrians and cyclists. Narrow streets and layout of buildings require slow traffic speeds, providing a safer environment for all.

Easy to Move Around ✓

Owing to the presence of landmark buildings and a well marked canal lock system, the areas around Rosebank and Lock 16 offer easy navigation. Good path links to the towpath provide pedestrian and cycle-friendly routes leading to a range of community facilities, including green spaces.

Welcoming ✓

The open outlook onto the canal and easily accessible public art and interpretation panels provide focal points along the canal; these features encourage people to congregate, to meet and greet each other in their own neighbourhood.

Adaptable ✓

There is limited flexibility to accommodate changes to current street patterns and layout.

Resource Efficient ✓

Traditional buildings are constructed of good quality and durable materials that are easily maintained.



4. Our Places and Streets: Waterside - Camelon

Analysis

Direct links from the streets to the towpaths encourage pedestrian and cyclist use. The streets offer a pleasant, varied walking/cycling experience.

The street network is well connected, with good links to shops, community facilities and the surrounding area.

There is a range of service and retail facilities within walking distance of Lock 16 and Rosebank.

The presence of key landmark buildings overlooking the canal and towpaths along with good vistas from the canal aid navigation and make it easier for people to move around the area.

There is a range of community facilities and shops within walking distance of the canal.

The area is serviced by buses, with 2 train stations available nearby.

There is a variety of building types including landmark buildings constructed of traditional materials. These create strong and distinctive urban character.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists

Connections to Wider Networks

Connections Within a Place

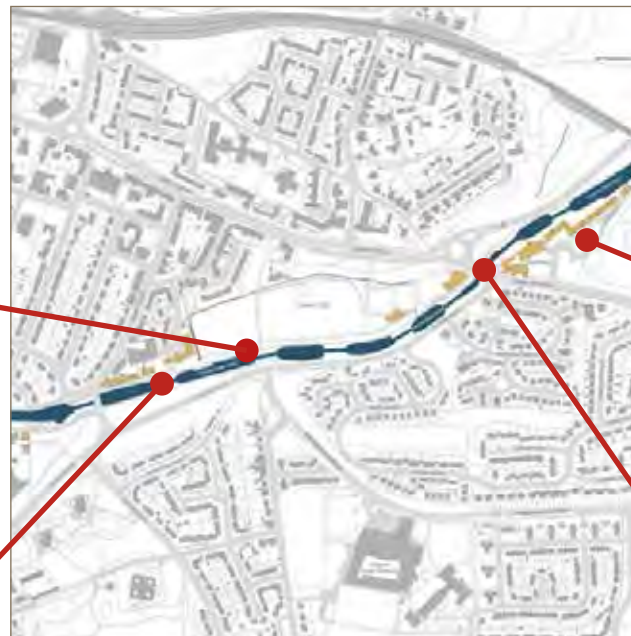
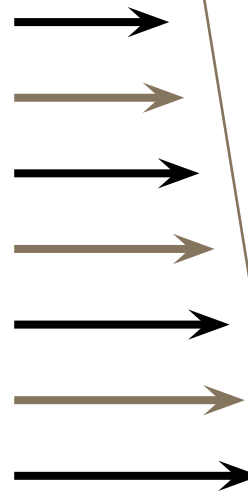
Block Structure

Walkable Neighbourhoods

Public Transport

Context and Character

Orientation



4. Our Places and Streets: Village “Green” - Dunmore

Qualities of Successful Places - Dunmore

The historic village of Dunmore was designated a conservation area in 1977. It is located on the River Forth approximately 2 miles northeast of Airth. Built in the 19th Century to house workers on the estate of the Earl of Dunmore, it consists of attractive cottages on three sides of a village green. The simple urban pattern demonstrates qualities of successful urban places that can be applied to the layout and detailed design of new neighbourhoods within the greater Falkirk Council Area.



Distinctive ✓

The individual urban character of this purpose built estate village derives from the arrangement of historic cottages around a central village green enhanced by its setting which affords views across the Forth Estuary.

Safe and Pleasant ✓

Shared use street provides safe and attractive movement for pedestrians and cyclists; road geometry reduces vehicle speed. Street clutter is minimal with few signs and discreet lighting.

Easy to Move Around ✓

Street layout designed around central village green provides good connectivity for all types of movement.

Welcoming ✓

Central village green creates a safe, welcoming space and focal point for social interaction.

Resource Efficient ✓

Traditional materials are locally resourced, distinctive and durable - natural Scottish sandstone, natural Scottish slate.



4. Our Places and Streets: Village "Green" - Dunmore

Analysis

Street Design Hierarchy

Shared street around central village green and road geometry provides a pleasant walking and cycling experience.



The arrangement of cottages around the perimeter of the village green creates a distinctive urban form that provides surveillance over communal open space; listed buildings provide landmarks and views of the Forth Estuary provide vistas for ease of navigation.



The simple urban pattern of buildings arranged around a central space responds positively to local conditions and enhances the special historic character and appearance of the conservation village.



Buildings present gable ends to face the Forth Estuary to provide shelter for front and rear elevations.



4. Our Places and Streets: Contemporary Suburb - Kinnaird

Qualities of Successful Places - Kinnaird

Kinnaird Village has been developed in accordance with an approved masterplan. The vision for the scheme was to create a new settlement comprising a mix of housing types and streets within a mature landscaped setting ; new landscaping features including a major SUDS element and the introduction of mixed uses, including shops and schools, add to interest and variety within the development as a whole. The layout and design of the new suburb demonstrates qualities of successful urban places that can be applied to the layout and design of new settlements within the greater Falkirk area.



Distinctive ✓

The development positively responds to relevant aspects of the local context including the mature landscaped setting providing tree lined streets and open landscaped areas.



Safe and Pleasant ✓

Wide cycle/footpaths provide safe and attractive pedestrian and cycle movement network connections.



Easy to Move Around ✓

Streets with cycle/pathways are well connected to existing movement networks providing good circulation for all modes of transport and all groups of street users.



Welcoming ✓

Layout provides walkable access to local shops and schools with landscaped open spaces providing opportunities for social interaction.



Adaptable ✓

Parking is accommodated by a variety of in-curtilage, on-street and rear parking courts, lessening visual impact and providing variety.



Resource Efficient ✓

The major SUDS feature attenuates surface water drainage and provides biodiversity, a habitat for wildlife and an attractive aspect and amenity space for surrounding streets.



4. Our Places and Streets: Contemporary Suburb - Kinnaird

Analysis

Street design offers a pleasant, safe and varied walking and cycling experience.

The development is well connected to nearby main roads and public transport facilities.

Shops and other mixed use facilities including a range of schools from nursery to primary are within walking and cycling distance.

A range of street types provides distinctive urban form with landmarks and vistas that provide good orientation and navigation.

New development provides a range of facilities in key locations within walking and cycling distance via permeable street network.

The area is serviced by buses, with a train station available nearby.

Varied street design responds positively to a range of local site conditions including mature landscaping, open green space, local schools and shops and SUDS feature.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists

Connections to Wider Networks

Connections Within a Place

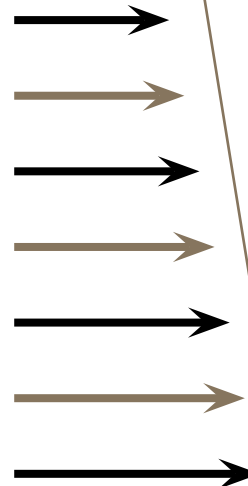
Block Structure

Walkable Neighbourhood

Public Transport

Context and Character

Orientation



4. Our Places and Streets: Contemporary Suburb - The Drum

Qualities of Successful Places - The Drum

Initial phases of The Drum have been developed within former farmlands on the outskirts of Bo'ness town in accordance with an approved masterplan. The vision for the scheme was to create a strong sense of place, reflecting the special urban qualities of surrounding towns and villages; landscaping and variable character within each part of The Drum would add to the overall urban quality. The built settlement, to date, demonstrates qualities of successful urban places that can be applied to the layout and detailed design of other new neighbourhoods within the greater Falkirk Council area.

Distinctive ✓

The development as built to date has created a strong sense of place by integrating different typologies of street design and building types with a variety of open and enclosed spaces including parking courts, squares and terraces.

Safe and Pleasant ✓

The designed street hierarchy applied to the site carefully balances movement with traffic flow; minimal application of street signage and furniture results in clutter free spaces.

Easy to Move Around ✓

Non - standardised street designs provide good connectivity and movement networks for all users.

Welcoming ✓

The street layout is punctuated by a variety of public spaces including squares, play area and landscaped edges which encourage walking and social interaction.

Adaptable ✓

Parking is provided by a range of off street and rear parking courts and on street parking. The mix of parking solutions lessens the visual impact of cars in the development and provides some flexibility for visitors and residents.

Resource Efficient ✓

Buildings and open spaces are orientated to benefit from solar gain and shelter from the prevailing wind. Lack of street clutter, areas of open space with soft and hard landscaping and distinctive, durable materials add quality and visual appeal.



4. Our Places and Streets: Contemporary Suburb - The Drum

Analysis

Some residential streets incorporate shared surfaces to favour pedestrian movement over vehicles.

Irregular internal street pattern contributes to variety of character within different parts of the settlement.

An aspect of the development that does not meet the terms of Designing Streets is that the development, as built to date, provides only residential uses; the facilities of the town centre of Bo'ness are not within easy walking distance.

The structure of the street network takes a variety of non - standard forms, creating gateways, vistas, enclosed and open streets and squares; multiple parking solutions add interest and diversity.

Different phases have contrasting architectural and urban character through careful design and planning; influences in phase 1 from traditional urban vernacular differentiate from contemporary courtyard houses and houses around compact squares to offer a pleasing variety and sense of place.

Streets laid out on an east west axis provide environmental benefits, maximising solar gain and daylight.

Street Design Hierarchy

Street Structure

Pedestrians and Cyclists

Connections to Wider Networks

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Orientation



5. Design Guidance: Street Structure - Context and Character

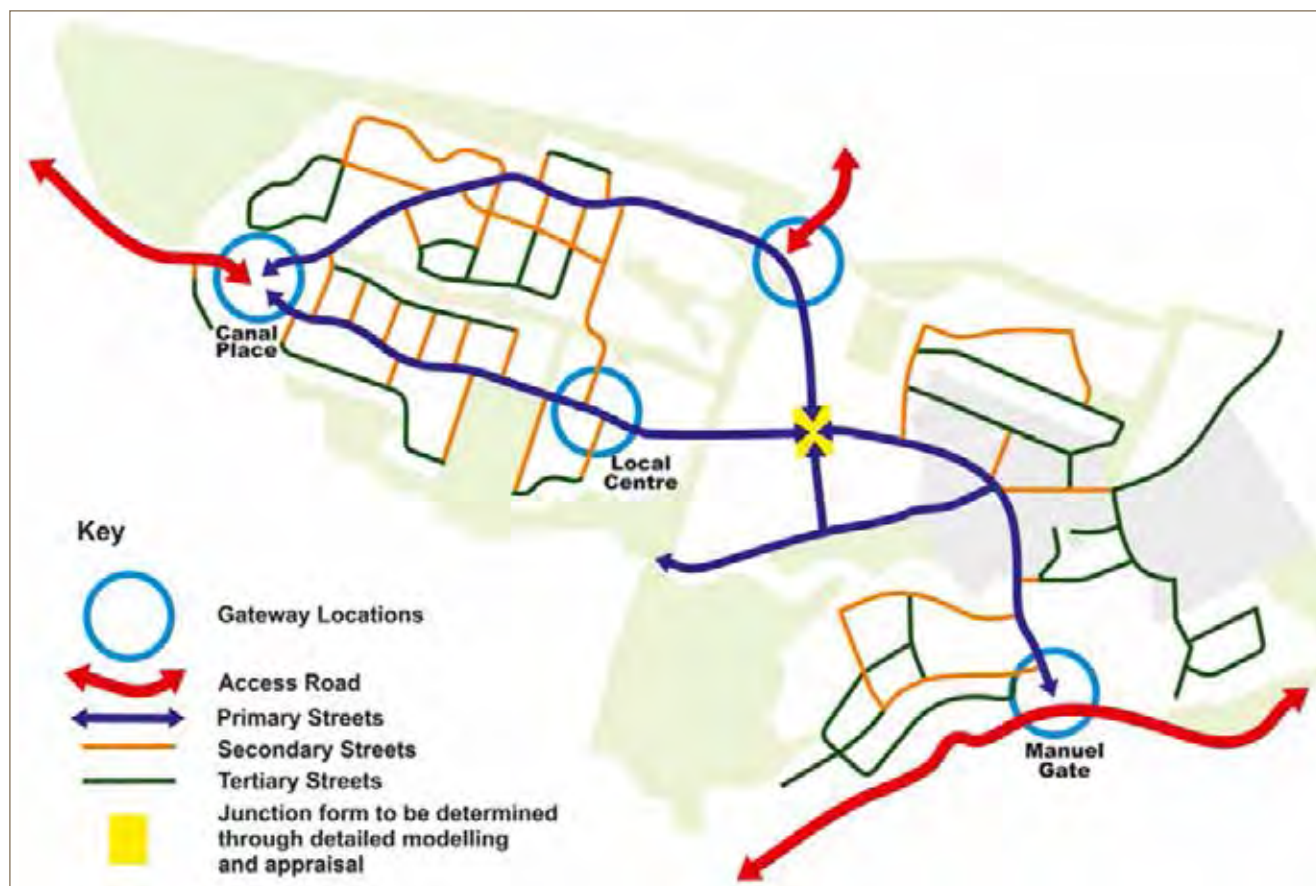
Understanding the site and its surroundings is essential to good site planning and design. It will help determine the appropriate character and sense of place which will inform the street structure and layout.

Key Principles

- Understand and take account of the landscape setting and topography of the site and the surrounding built form and street pattern.
- Make the most of the site's assets, including safeguarding and providing a setting for existing natural and built heritage features.
- Determine the appropriate street types (high streets, avenues, squares, wynds/lanes, mews, courtyards etc), and the corresponding building types (tenement, terrace, detached).
- Introduce appropriate mixed use where possible to create variety.
- Apply The Place Standard to help local community identify character and qualities of a place and to help set out local aspirations.

Further Guidance

- Designing Streets Pages 29-30
- Falkirk Council Supplementary Planning Guidance 'Design Statements'



Street Structure: Proposals should be underpinned by a clear understanding of the role and function of different types of streets. It is useful to set this out in a Street Hierarchy document.

5. Design Guidance: Street Structure - Context and Character



Main Street



Secondary Street



Courtyard

Square

Utilising Assets:

Burns, mature trees, hedgerows, historic buildings and walls are examples of features which can be retained to give character and sense of place.



Street and Building Types:

These provide traditional, proven models for structuring streets. The street structure should be built around an appropriate menu of typologies rather than a traditional roads hierarchy which was based purely on vehicle numbers and speeds.



Mixed Use:

Larger new neighbourhoods offer the opportunity to introduce services and facilities which are convenient to local residents.

5. Design Guidance: Street Structure - Permeability and Legibility

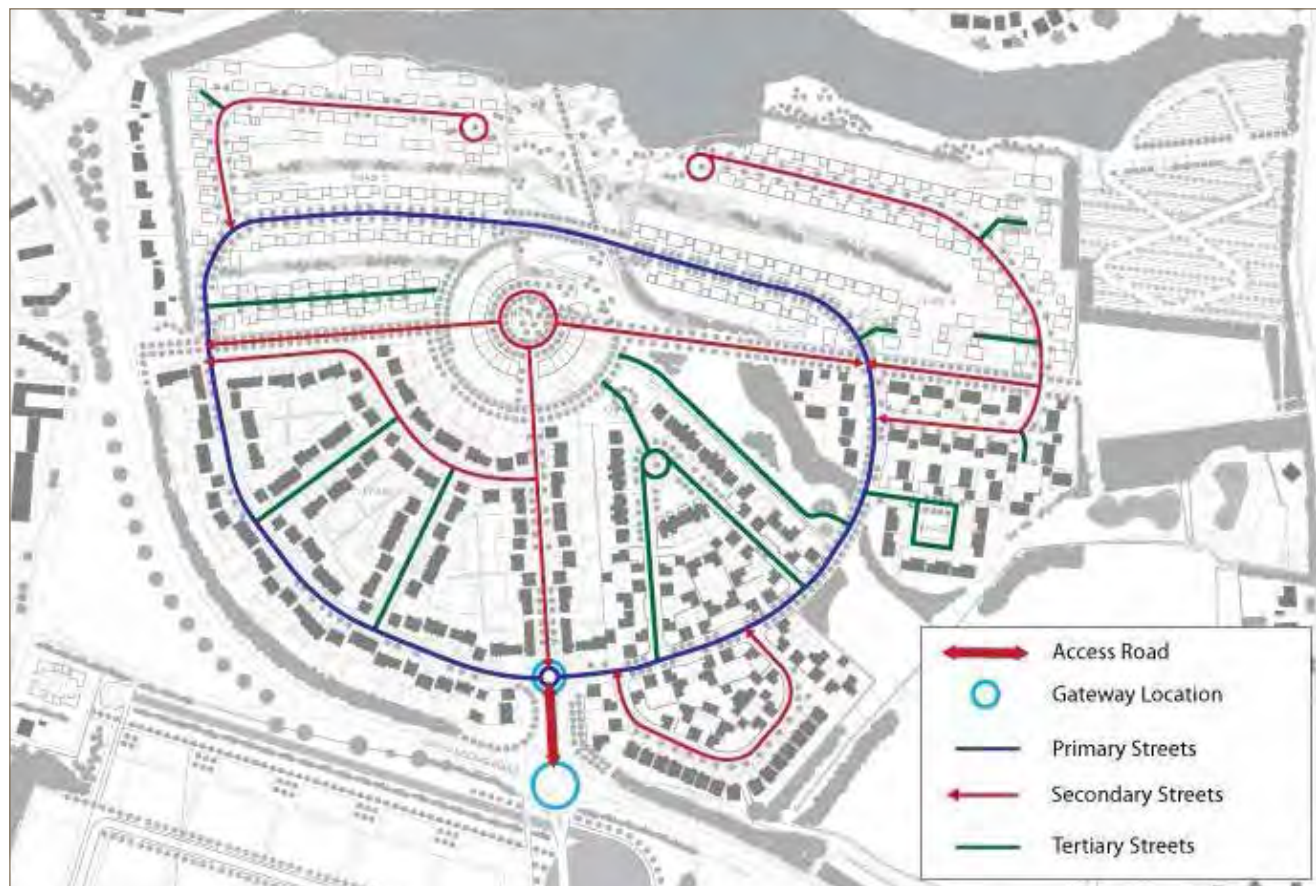
Ease of movement and navigation is vital in new neighbourhoods, so that journeys on foot, in particular, are encouraged.

Key Principles

- Prioritise the needs of pedestrians and cyclists over vehicles in the design of streets, spaces and junctions.
- The layout should be permeable, and maximise connections with the surrounding street and path network.
- Exploit the potential to integrate active travel routes into the green infrastructure.
- There should be easy access to local facilities such as schools, public transport, shops and other services.
- Use features, nodes and landmarks to provide legibility and identity.
- Apply The Place Standard to input from local community on how places perform and function with respect to ease of movement and navigation.

Further Guidance

- Designing Streets Pages 15-25
- Falkirk Council Supplementary Planning Guidance Note - Travel Plans



The Drum: Permeable street structure created by a traditional block structure allows multiple options for pedestrians, cyclists and vehicles. This, combined with building height at key nodes and distinctive junctions and open spaces helps navigation and orientation within the development. (Masterplan Copyright of AREA, Linlithgow)

5. Design Guidance: Street Structure - Permeability and Legibility



Grid Pattern:

The Grahamston area, with its traditional block structure, provides excellent permeability with a range of route options for pedestrian to access the surrounding area.



Connections within a Place:

Street and footpath connects local facilities with residential areas, creating a walkable neighbourhood.



Cul de Sacs:

This 1980s layout is poorly connected with its surroundings, lengthening journeys, and reducing flexibility and adaptability.



Connections to Wider Networks:

This path offers pedestrian and cycle connections from the local neighbourhood to the railway station, the canal network and routes to the town centre.

5. Design Guidance: Street Structure - Green and Blue Infrastructure

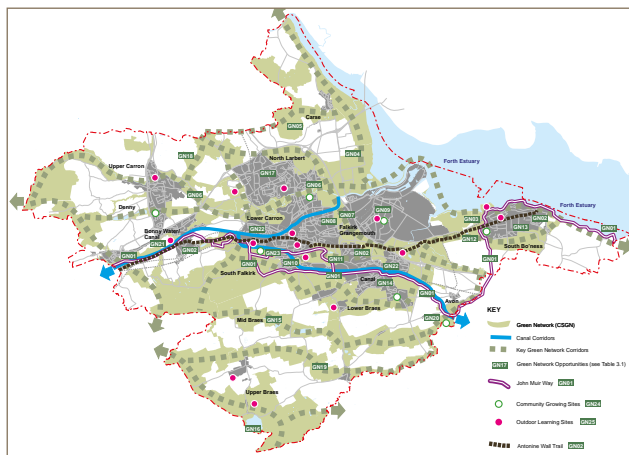
Well-integrated green and blue infrastructure is fundamental to quality of place and our response to climate change as well as helping to deliver Falkirk Greenspace.

Key Principles

- Create a landscape and open space framework which enhances, structures and unifies the development, based on the opportunities presented by the site, the intended street typologies and the requirements of the Council's open space policies and standards.
- Make connections with the surrounding green network.
- Integrate open space into the layout, using hard and soft landscaped spaces to create nodes and places for social interaction.
- Use street trees, particularly to give quality and emphasis to particular street typologies.
- Scottish Water is actively seeking to remove surface waters from combined sewerage systems, as set out in their surface water policy. On this basis, developments should include space for appropriate SUDS solutions wherever possible.
- Integrate SUDS creatively into the open space framework, using features to enhance amenity and biodiversity.
- Soften the edge of urban fringe sites through robust structure planting.
- The incorporation of sustainable drainage systems, watercourse corridors and natural flood management measures promotes improvements to the water environment and assists in contributing to sustainable flood risk management.
- Explore opportunities to restore the existing water environment.

Further Guidance

- Falkirk Council Supplementary Guidance: SG05 Green Infrastructure and New Development, SG07 Biodiversity & Development, SG10 Trees & Development.
- Falkirk Greenspace: A Strategy for our Green Network
- Green Infrastructure: Design & Placemaking Scottish Government



Falkirk Greenspace:

New development offers opportunities to contribute to the delivery of the wider green network.



Sustainable Urban Drainage Systems:

The SUDS ponds create a wetland which acts as an attractive focal point for the neighbourhood and brings the green network into the development.



Street Trees:

Provide structure and unity to a development, and can help to give identity and formality to main streets and boulevards.



Pocket Parks:

Small, well-designed open spaces at the heart of a neighbourhoods provide opportunities for play and social interaction.

5. Design Guidance: Street Structure - Buildings and Spaces

The character of streets is formed by the way space is enclosed by buildings.

Key Principles

- Buildings and building lines should be designed to give definition, enclosure and character to streets and spaces.
- Streets, spaces and paths should wherever possible have buildings fronting on to them, with frontage access. Where this is not possible a high quality architectural or landscape treatment is required, with an appropriate level of natural surveillance to make them safe.
- For infill sites, existing building lines should be respected.
- Street elevations should be designed as a coherent composition, with appropriate features to order and unify them, rather than a random collection of individual house types.
- Orientate streets and buildings to take advantage of solar gain and shelter.

Further Guidance

- Designing Streets Pages 15-25



Boundary Treatments:

A natural stone wall provides a high quality edge to this development.



Enclosure: A strong linked building frontage close to the footway (with parking in rear courts) defines an intimate and characterful street space. The gently curving alignment and the occasional offsetting of the building lines creates an pleasing informality.



Street Composition:

Where detached houses have minimal spacing, appropriate grouping of house types and forms is important to create visual continuity within the frontage.



Frontages on Main Streets:

Achieving robust frontages on to major through routes is important. At Kinnaird, this has been delivered through a combination of flats with rear court parking and detached houses with a parallel service road.

5. Design Guidance: Street Structure - Achieving Appropriate Traffic Speed

The layout of the street and choice of materials should help achieve appropriate traffic speed.

Key Principles

- Appropriate traffic speed for the context should be achieved by good design from the outset rather than bolted-on traffic calming measures at the end of the design process.
- Where sufficient space is available to locate all street utility services together with other on-street physical features such as landscaping, on-street parking and staggered building lines, the resultant narrowing of street width reduces speed.
- Reduction in the uninterrupted lengths of street between junctions influences speed.
- Materials can have a significant influence on speed through visual perception or physical characteristics.

Further Guidance

- Designing Streets Pages 32-35
- SCOTS Road Development Guide, p.35 & pp.121-125.



Limiting Forward Visibility: The curving alignment of the street combined with street trees, which reduce the perceived width, help to limit vehicle speeds. This is reinforced by traditional traffic calming in the form of speed tables.



Build Outs: These build outs create sufficient deviation in the street to assist calming, and also create informal parking opportunities. The parked car itself contributes to the calming effect. The grassed treatment helps soften the street appearance.



Calming Through Street Design: Traffic speeds are kept low through an abrupt stagger in the road alignment, reinforced by prominent and attractive planters. No vertical features (bumps, cushions, or speed tables) are necessary.



Curved Road Layouts: To reduce traffic speeds in the neighbourhood.

5. Design Guidance: Street Structure - Junction Types and Arrangements

The needs of pedestrians should be prioritised in the design of street junctions.

Key Principles

- Junctions should be designed to suit the needs of pedestrians first in terms of visibility and desire lines.
- Junctions should be designed to suit street style, use and demand.
- Residential areas should incorporate a variety of different junction types prioritising urban design objectives that consider the quality of the space, rather than relying on standardised solutions.
- Swept paths for large vehicles and parking requirements for residents should be taken into consideration.

Further Guidance

- Designing Streets Pages 35-37
- SCOTS Road Development Guide, p.39 & pp.70-73.



Tight Corners:

Are an effective means of reducing traffic speeds and making the street safer for pedestrians.



Raised Junction:

Slows traffic speed and provides crossing point for pedestrians.



Alternative Street Transition:

Different treatment to show transition from one street type to another.



Crossroads:

Are an effective way of reducing traffic speed in urban areas.

5. Design Guidance: Street Structure - Streets for People

Streets should be designed to create places where people can meet and socialise.

Key Principles

- Streets should provide shared spaces for social interaction and safe activity by a community.
- Shared space should be designed to encourage low vehicle speeds and to prioritise pedestrians.

Further Guidance

- Designing Streets Pages 38-39
- SCOTS Road Development Guide, p.39-41 & pp.85-94.



Central Green Space:
Provides social space for neighbourhood residents.



Shared surfacing:
With tight corners helps reduce traffic speeds and provides a connection between the surrounding houses and green space.



Falkirk High Street:
Has provision for vehicles but is prioritised for use by pedestrians.



Shared streets:
Create safe places for activities.

5. Design Guidance: Street Structure - Integrated Parking

The quality of the street should be enhanced through the use of a variety of types of parking.

Key Principles

- Car parking to meet Falkirk Council's standards should be carefully designed into developments to lessen visual impact.
- Integrated parking should be incorporated into street design by a variety of means to enhance street quality.

Further Guidance

- Designing Streets Pages 40-43
- SCOTS Road Development Guide, p.41-42 & pp.137-170.



Undercroft Residents' Parking:

Stops vehicles and parking bays dominating the street layout.



Parking Courts:

Allows cars to be taken off the streets.



Integrated Parking:

Parking is well integrated into this shared use street through appropriate planting and materials.



Variety of hard surfacing :

Parking areas are highlighted by contrasting materials to enhance the shared space in this development.

5. Design Guidance: Street Structure - Emergency and Service Vehicles

Street layouts should accommodate emergency and service vehicles without compromising a positive sense of place.

Key Principles

- Street layouts should be designed with the consideration of the needs and space standards required by emergency and service vehicles.
- Service and emergency vehicles should be accommodated by street design without compromising the quality of the place or dominating the layout.
- Swept path analysis is a useful tool to inform street layout and design.

Further Guidance

- Designing Streets Pages 44-45
- SCOTS Road Development Guide, p.43, p.74, pp. 81-82 & pp.95-98.



Service Vehicles:
Can be accommodated through careful street design without dominating the street layout.



Street Design:
Should accommodate service vehicle without dominating the street layout.



Well connected street patterns:
Reduce the need for reversing of service and emergency vehicles.



Emergency Vehicles:
Street design should accommodate emergency vehicles without detriment to positive quality of place.

5. Design Guidance: Street Structure - Building Form and Detail

The form and detailing of individual buildings should combine the best of the past and present, combining an understanding of local context and tradition with crisp, contemporary design.

Key Principles

- The design of buildings should respect their context and take inspiration from local vernacular traditions.
- Infill developments in particular should respect the immediate context in terms of height, massing, building lines, and materials.
- Elevational treatment and window arrangements should be crisp, balanced and well ordered, avoiding fussy 'period' features and detailing.
- A limited palette of appropriate materials should be deployed, again taking account of local context.
- The curtilage of buildings should be well defined, providing a clear demarcation between public and private space.
- The building layout and positioning of windows should provide the requisite levels of privacy and daylighting.



Best of Past and Present: These townhouses take design references from the surrounding traditional buildings incorporating steep pitched roofs and timber windows and doors within a contemporary design.



Balanced Composition: This development creates clean lines and a well ordered composition of windows and doors; the limited palette of colours and material helps create a unified appearance.



Contemporary Tenements: This redevelopment provides a contemporary interpretation of the Victorian tenements it replaced. Sandstone reclaimed from the previous buildings has been reused to provide a further link with the past. The colour of brick has been chosen to match the warmth of the red sandstone.



Local Distinctiveness: The elevations on this standard house type reflect the local context in terms of design, proportions and materials.
(Copyright Mactaggart & Mickel Homes Ltd)

5. Design Guidance: Street Structure - Drainage

Drainage should be integrated into the design of a place in order to minimise environmental impacts.

Key Principles

- Streets should incorporate SUDS (Sustainable Urban Drainage Systems) techniques under current legislation as required.
- Drainage design principles should be discussed with Falkirk Council at an early stage in the design of street layouts.
- Scottish Water should be consulted as early as possible on proposed design and layout plans for drainage strategies.
- All assets intended to vest into Scottish Water must be constructed in compliance with latest Sewers for Scotland guidance.
- All drainage proposals for developments must consider Surface Water Management options early on as connection to the combined sewer network will not be accepted.



Retention Pond:
Is integral to housing layout design.



Retention Pond:
Is integral to housing layout design and provides opportunities to enhance local biodiversity.

Further Guidance

- Designing Streets Pages 46-47
- SCOTS Road Development Guide, pp.43-47, p.117, pp.125-130, & pp.172-173.
- Falkirk Council: SG05 Biodiversity and Development
- CIRIA SUDS Manual (C757)
- Sewers for Scotland (current edition)
- PAN61: Sustainable Urban Drainage Systems
- Scottish Water's Surface Water Policy
- SUDS for Roads
- SUSDRAIN



Variation of retention pond:
Exemplar of use of SUDS treatments in a modern neighbourhood design.
(Copyright City Legacy Homes)



Porous Paving:
A permeable resin surface surrounding trees allows water to penetrate the ground surface to the soil underneath.

5. Design Guidance: Street Structure - Utilities

The layout of streets and footways should not be dictated by the accommodation of services.

Key Principles

- The accommodation of services in streets should be designed to maintain the quality of place.
- Unless agreed otherwise, all services other than sewers should be located in land eligible for adoption by Falkirk Council as Roads authority, i.e. footways, verges and adoptable footpaths.

Further Guidance

- Designing Streets Page 48
- SCOTS Road Development Guide, p.47, & pp.98-102.
- National Joint Utilities Group at www.njug.org.uk.



Use of cobbles to form service strip retains the quality of the place without the street layout being dictated by the placement of services.



Services/Utilities strip at the side of a road.



The accommodation of utilities should not affect the layout/design of roads and footways.



Utilities can be integrated into a service strip at the side of the roadway as a means of easy maintenance.

5. Design Guidance: Street Structure - Planting

Street design should integrate natural landscaping features and foster biodiversity.

Key Principles

- Existing and new soft landscape features should be integrated into street design to enhance biodiversity value, add visual interest and to improve the micro-climate.
- Decisions on planting design including maintenance arrangements should be discussed with Falkirk Council at an early stage in the design process.
- Falkirk Council, acting in the role as Roads Authority, will not generally adopt planted areas except grass verges within the road boundary, main road visibility splays and elements of the SUDS system.

Further Guidance

- Designing Streets Pages 49
- SCOTS Road Development Guide, p.48, pp.106-107, pp.131-133 & pp.172-173.



Use of street trees and grass verges helps soften the appearance of the street.



Street visual quality is enhanced by the retention of mature trees and by the addition of new planting and appropriate hard landscaping materials.



Gardens as grass verges soften visual impact.



Street design should integrate soft landscape features and enhance biodiversity value.

5. Design Guidance: Street Structure - Materials

Appropriate specification and detailing of street materials contributes to the visual appeal and long term sustainability of streets.

Key Principles

- Street materials should be durable, sustainable, safe and easy to maintain.
- Where streets are to be adopted, choice of materials must be acceptable to the Council.
- Different materials should be used creatively to add visual interest and richness as well as clear functional definition to the street environment.
- Materials should be appropriate to their context. Use of high quality, traditional elements such as natural stone paving, or a suitable imitation, will be encouraged in high profile locations and conservation areas.

Further Guidance

- Designing Streets Page 50



Small Element Paving:

A wide range of paving materials are available to add colour, interest and definition, appropriate to the character of the area.



Detailing:

Careful detailing of this of shared use space enables the carriageway to be subtly delineated.



Whin setts, a traditional and durable street material, are used creatively to reinforce a narrowing of the street and a transition in the street environment.



Quality:

A small area of reclaimed stone flags with a setted margin have been used in a conservation area setting to provide a high quality, visually rich public realm. Use of reclaimed materials increases the sustainability of the scheme.

5. Design Guidance: Street Structure - Reducing Clutter

Street signs, road markings and lighting should be minimised, and furniture appropriately designed, to reduce street clutter.

Key Principles

- Street markings and signage should be minimised and designed to avoid having a dominant visual impact on a place.
- Street lighting should be designed as an integral part of the design at an early stage in the design process.
- Street furniture should add to the overall quality of design of a place; location, quantity and design should avoid pedestrian obstruction.

Further Guidance

- Designing Streets Pages 51-53
- SCOTS Road Development Guide, p.48, p.100 & pp.121-137.



Signage:

No street markings and minimal signage creates a clear, uncluttered environment which does not obstruct pedestrian movement.



Lighting:

Has been integrated throughout the design process reducing street clutter.



Furniture:

Street furniture has been considered as an integral part of the street design to create quality public realm.



Street Lighting:

Bespoke street lights reduce clutter.

6. Design Principles Checklist and The Place Standard

Checklist

The following is a summary checklist of the design principles set out in this SG.

Context and Character	Street structure should be informed by a thorough understanding of local conditions including topography, landscape, surrounding buildings and street patterns. Proposed street and building types should be determined in accordance with place and movement functions to create diversity and mixed use.
Permeability and Legibility	Permeable layouts, incorporating multiple connections with existing street and path networks, should prioritise pedestrian and cycle movement over vehicles. Local facilities should be easy to access. The location of distinctive features at key nodes facilitates easy navigation and orientation.
Green Infrastructure	Proposed residential neighbourhoods should be designed around a landscape and open space framework which harnesses the potential of the site and connects with the surrounding green network. Open spaces for social interaction, street trees, structure planting and sustainable urban drainage systems should be integrated into the green infrastructure to enhance and unify developments.
Buildings and Spaces	Buildings should be designed to create distinctive streets and spaces, with high quality architectural treatments to frontages facing on to streets, open spaces and paths. Street elevations should be considered as an exercise in coherent, integrated design to avoid random collections of house types.
Building Form and Detail	The design of individual buildings should reflect local building tradition in a contemporary manner. Detailing and materials should mirror the local context. The curtilage of buildings should provide clear demarcation between public and private space.
Achieving Appropriate Traffic Speed	The mitigation of traffic speed should be considered and incorporated from the earliest stages of the design process. Features such as landscaping, on-street parking, staggered building lines, minimising lengths of streets between junctions and careful use of materials can be employed to good effect to achieve appropriate traffic speed.
Junction Types and Arrangements	The design of junctions should primarily address pedestrian desire lines and visibility. Junctions in proposed residential neighbourhoods should vary in design to reflect street type, use and context rather than apply standardised solutions.
Streets for People	Shared spaces for safe, communal activity should be incorporated into proposed residential neighbourhoods.
Integrated Parking	Integrated car parking should enhance the streetscape by applying a variety of means. Parking provision should meet Falkirk Council's standards.
Emergency and Service Vehicles	Streets should be designed to allow for the needs and space standards required by emergency and service vehicles, without compromising the quality of place.
Drainage	Streets should incorporate SUDS - Sustainable Urban Drainage Systems - to meet local and national requirements.
Utilities	The placement of services in streets should address local requirements without compromising the quality of place.

6. Design Principles Checklist and The Place Standard

Checklist (continued)

Planting	Natural landscape features should be incorporated into street design to provide visual interest, biodiversity and improve the micro climate.
Materials	Careful choice and design of materials in the streetscape adds to the quality of a place, providing variety, richness and visual interest. Different materials can be applied to delineate a variety of functions.
Reducing Clutter	Street markings, signage, lighting and street furniture should be designed at the outset of the design process to add to the overall quality of a place. Location, quantity and design should be carefully considered to avoid pedestrian obstruction.

The Place Standard

The Place Standard	The Place Standard is a tool for assessing the quality of a place and identifying how it can be improved - see www.placestandard.scot . It helps local communities assess what works well about places and highlights where there is room for improvement. It allows for consistency in the assessment of a place and helps communities set out their aspirations. It is part of the conversation and consultation process between local communities, the developer and the planning authority.
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