SUPPLEMENTARY PLANNING DOCUMENT

DRAFT

Kirklees COUNCIL

HIGHWAY DESIGN GUIDE

AUGUST 2018

Contents

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This document has been prepared by Kirklees Council

Cover Image: Google (Aerial view of Hanging Heaton)

Kirklees COUNCIL

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Introduction

Image: Hamilton Baillie Associates & The Urbanists

THE VISION

Successful highway design requires a full understanding of place, context, and the many factors that influence and inform the outcome of the design process. Careful assessments of sites, and a collaborative approach to design are needed, if high quality streets are to be created.

The most successful streets are those where traffic and other activities have been integrated together, and where buildings and spaces, and the needs of people, rather than vehicles, shape the area and create a sense of place.

This SPD will encourage applicants to deliver good highway design, and contribute to the creation of attractive, high quality, and sustainable places within Kirklees district.

Introduction

i. The purpose of this Highway Design Guide SPD is to promote high standards of highway design that reflect nationally recognised best-practice, and facilitate the delivery of high quality residential, employment and mixed-use developments in Kirklees. This SPD is relevant to all aspects of the built environment, and will help to encourage good design in terms of how developments, routes and spaces relate to one other. Good design can help to create streets and public spaces that are safe, accessible, and pleasant to use. There are many benefits to be gained from thinking coherently about the way places are designed.

ii. This guide has been prepared to outline the highway design considerations that should be taken into account in advance of preparing a schemes 'layout'. Many aspects of a development are irreversibly pre-determined once this has been finalised. A scheme's layout governs the alignment and arrangement of roads in relation to existing highways, and also frames and fixes how buildings, routes and open spaces relate to one another.

iii. Considerations relating to drainage, utilities, structures, pedestrian movement, inclusive design, cycle provision, landscaping, parking, servicing, public transport, public open space, emergency access, and street lighting should all influence and inform a schemes layout, rather than have to adapt to it. The retrospective consideration of these details and their associated standards can cause unnecessary delay, frustration, and cost, and is unlikely to lead to the best outcome in terms of highway design quality. This guide will ensure that highway design considerations such as these are key design drivers rather than ancillary afterthoughts, and are therefore taken into account and responded to well in advance of scheme's 'layout' being finalised.

iv. This guide encourages developers and designers to create streets for people, by responding to all the other components that make up the public realm and influence the identity of a place. It also covers the design of the 'highway' in its broadest sense, namely the public space between private property that encapsulates all public activity, including the circulation and storage of motorised traffic.

v. Well-designed streets should accommodate all movements, functions and purposes, with their inter-relationship considered from the outset. The emphasis should be on 'people movement', with the needs of people with health conditions or impairments, the elderly, and children, prioritised for all modes. Walking and cycling should be considered the most important modes of transport, as they increase human interaction, contribute to well-being, and are the most sustainable forms of movement. In addition to offering a sustainable alternative to the car, walking and cycling can also make a positive contribution to public health, the overall character of a place, and to tackling climate change through the reduction of carbon emissions.

vi. Highway design has historically been the product of the rigid application of highway engineering standards, which has often resulted in utilitarian development that somewhat contradicts the principles of urban design upheld today. Imaginative and context-specific design that does not rely on conventional standards can also achieve the same high levels of safety and amenity. It is within that frame of reference that this guide seeks to facilitate innovative designs that are appropriate to context and character.

vii. An aim of this guide is therefore to encourage a move away from generic prescribed standards by placing a more positive emphasis on using engineering judgement to arrive at feasible and reasonable context specific solutions. The SPD facilitates this by clearly outlining the parameters and principles that the Council considers to constitute good highway design; the **KEY DESIGN DRIVERS.**

KEY DESIGN DRIVER:	
EXAMPLE	**PRIORITISING PEDESTRIANS**
1	**Direct routes should be provided wherever possible to bus stops, local facilities, schools and adjacent neighbourhoods, in such a way that makes it more convenient and attractive to walk than to drive to such destinations.**

viii. The Council will assess whether development complies with the key design drivers using a **COMPLY OR JUSTIFY** approach. How and to what extent a development complies with the key design drivers will be a material planning consideration when making planning decisions. Applications that align with and respond to the key design drivers are more likely to be successful and approved without delay. The Council may be flexible with regard to compliance where it can be demonstrated that a proposal represents exceptional or innovative design that significantly enhances its immediate setting and/or is sensitive to the defining characteristics of its area. Nevertheless, any divergence from the key design drivers must be fully justified within a Design and Access Statement (see page 13) or within a separate planning statement (for minor applications). Applicants should also expect to demonstrate how they have taken account of the relevant Local Plan policies that this SPD supplements.

Image: Poynton Shared Space Scheme (Route One Publishing)

ix. Successful highway design requires a full understanding of place, context, and the many factors that influence and inform the outcome of the design process. Careful assessments of sites, and a collaborative approach to design are needed, if high quality streets are to be created. The most successful streets are those where traffic and other activities have been integrated together, and where buildings and spaces, and the needs of people, rather than vehicles, shape the area and create a sense of place. This SPD will encourage applicants to deliver good highway design, and contribute to the creation of attractive, high quality, and sustainable places within Kirklees district.

Image: Accordia, Cambridge (Edward Broadhead)

GUIDANCE SUPERSEDED BY THIS SPD

The following publications will no longer be used by Kirklees Council in Planning Decision Making:

- **West Yorkshire Metropolitan County/Kirklees Council "Highway Design Guide" (1985)**
- **Requirements of New and Improved Roads and Paths (version 2, April 2016)**
- **Soakaways (version 1, April 2016)**
- **Gradients' (version 1, April 2016)**
- **Technical Approval of Surface Water Flow**
- **Attenuation Tanks and Pipes (version 1, July 2017)**

x. **The guidance listed above does not have SPD status and cannot be afforded any significant weight in planning decision making. This SPD replaces these publications and will (once adopted) be used to determination Outline, Full, Reserved Matters, and Discharge of Condition applications. It will also be used to guide and advise applicants seeking pre-application advice.**

Highway Design Principles

Good highway design is underpinned by a series of overarching 'place-making' principles that permeate through each and every aspect of highway design.

1. **Priority:** Putting pedestrians and cyclists first by designing vehicular routes that minimise barriers to their movement and ensure their safety.
2. **Inclusivity:** Catering for people of all ages and abilities so that the public realm can be navigated and negotiated by everyone.
3. **Legibility:** Ensuring that routes are recognisable, easy to understand, and able to be navigated by wayfinding, landmarks, gateways, nodes, and focal points.
4. **Connectivity:** Integrating development physically and visually with its surroundings.
5. **Permeability:** Providing a variety of pleasant, direct and convenient routes that connect to existing networks and local amenities.
6. **Functionality:** Using scale, texture and colour to reflect and reinforce an areas function and character.
7. **Safety:** Incentivising walking and cycling by creating a welcoming, secure and pleasant environment that incorporates natural surveillance, lighting, high-quality landscaping and protection from motor vehicles.
8. **Durability:** Utilising robust practical materials that will stand the test of time and which are easy to maintain and replace.
9. **Adaptability:** Incorporating high quality materials with the capacity to withstand and recover from environmental changes and events.
10. **Sustainability:** Delivering design that reduces car travel, fuel consumption and the use of materials with high embodied carbon; thereby meeting present needs without compromising the ability of future generations to achieve their own needs and aspirations.

Local Planning Policy:

xi. The Kirklees Local Plan sets out a vision and a framework for the future development of Kirklees district, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure. It also sets future planning policy on highway design related issues such as drainage, safety, access and parking.

xii. This SPD supplements the Local Plan policies relevant to highway design and facilitates their application. It does this by providing further guidance on how development can achieve appropriate forms of highway design and how national guidance should be interpreted and applied in a Kirklees context.

xiii. Supplementary Planning Documents (SPDs) are documents which add further detail to the policies in a Local Plan. SPDs can be used to provide further guidance on the development of specific sites, or on particular issues, such as highway design. Only guidance in the form of an SPD is capable of being a material consideration in planning decisions i.e. (Outline / Reserved Matters / Full / Discharge of Condition). SPDs are prepared where they can help applicants make successful applications, but should not be used to add unnecessarily to the financial burdens on development.

xiv. This guide supports the Local Plan's priorities and provides advice on how applicants can bring forward policy-compliant schemes. It also identifies matters for consideration which are likely to be raised within pre-application discussions.

xv. This SPD does not create new policy; it supplements Local Plan policy, and provides guidance on the interpretation and implementation of those policies relevant to highway design.

LOCAL PLAN POLICIES SUPPLEMENTED BY THIS SPD:

- LP04 Providing infrastructure
- LP05 Masterplanning sites
- LP20 Sustainable travel
- LP21 Highway safety and access
- LP22 Parking
- LP23 Core walking and cycling network
- LP24 Design
- LP27 Flood Risk
- LP28 Drainage
- LP31 Strategic Green Infrastructure Network
- LP33 Trees
- LP34 Conserving and enhancing the water environment
- LP47 Healthy, active and safe lifestyles

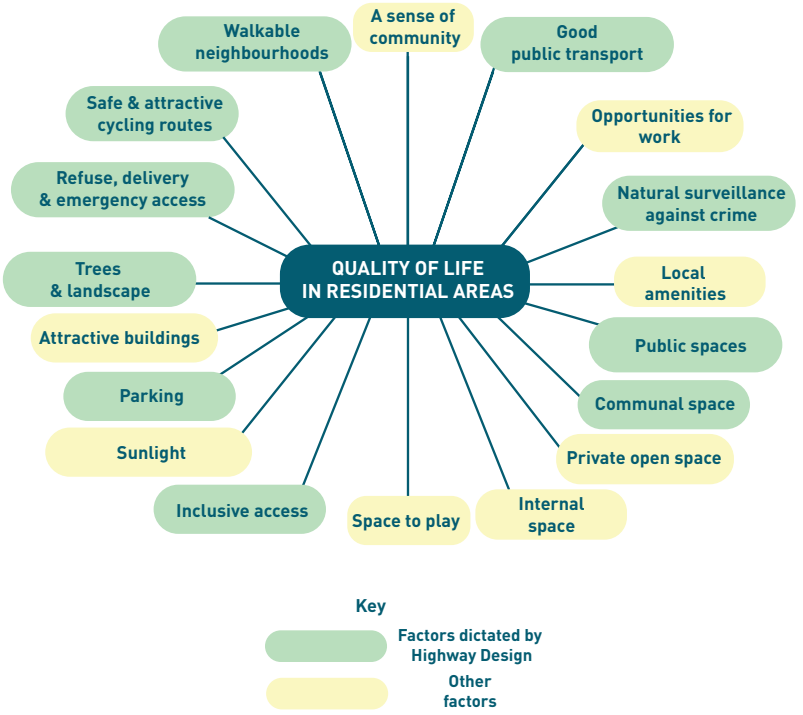
Kirklees Context:

xvi. The north and north-east parts of Kirklees are densely settled and are serviced by major roads, including the M62 and M606. The urban area of Huddersfield covers the central northern area of the district, while the settlements of Batley, Dewsbury and Heckmondwike are clustered in the north-eastern corner of Kirklees. Away from the large urban settlements, some small villages of a traditional character remain, such as those at Emley and Upper Hopton.

xvii. Many of the settlements in Kirklees have their roots in historic mill towns and mining heritage, although some areas have evidence of prehistoric Iron Age settlement, including Meltham. Disused shafts, pits and workings are scattered throughout the landscape, and historic rail and water based transport routes used to support the coal and textile industries that flourished during the Industrial Revolution remain, such as the Huddersfield Broad Canal and the Huddersfield Narrow Canal.

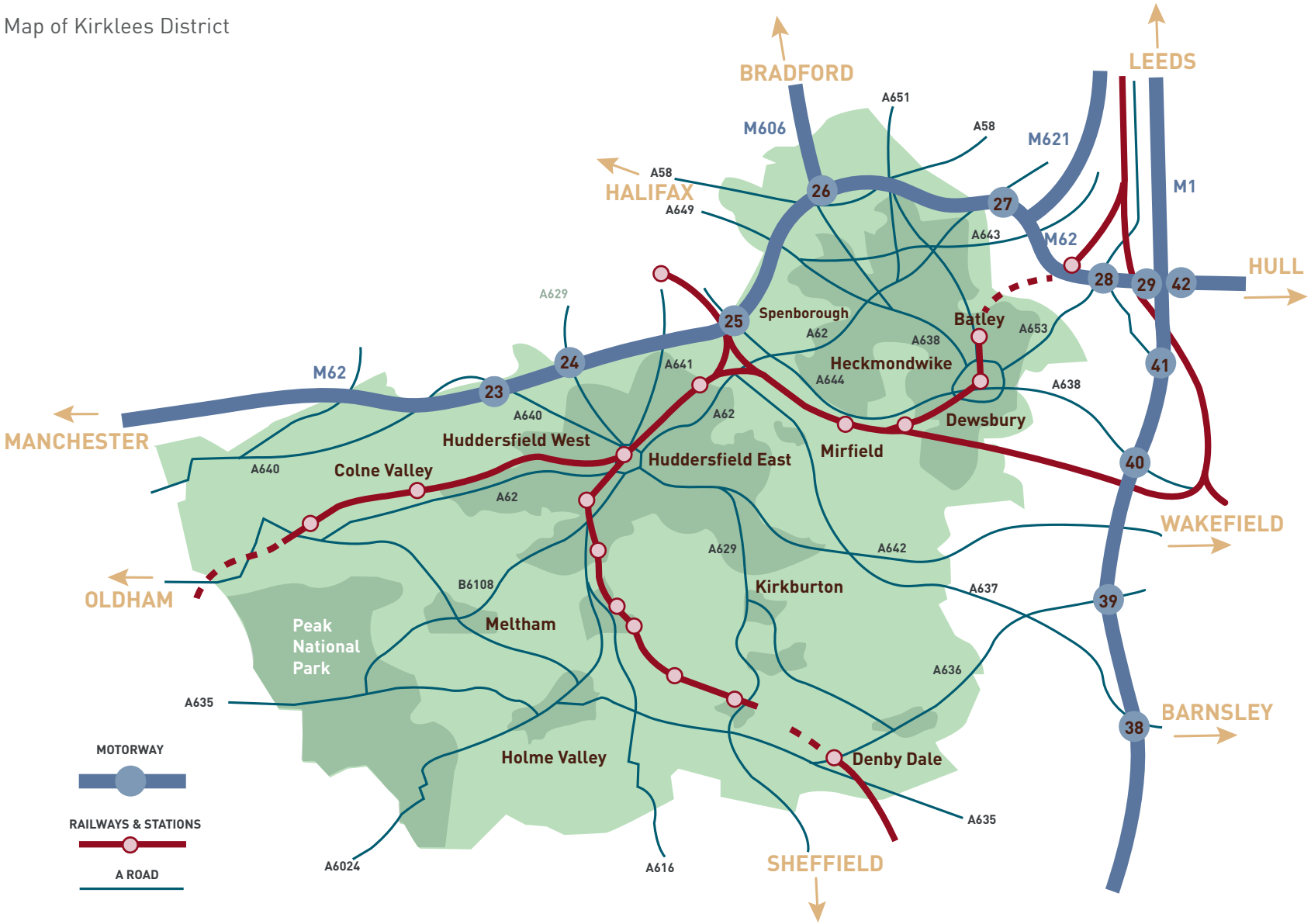
Image: View of Kirklees (Richard Harvey)

<u>Highways have many other functions, which are a vital component of residential areas, and greatly influence people's quality of life:</u>



xviii. Kirklees comprises steep valley topography that in some areas can make highway design and access challenging, while exacerbating surface water run-off and flood risk. The guidance within this SPD reflects and responds to these challenges.

Map of Kirklees District



Site Appraisal

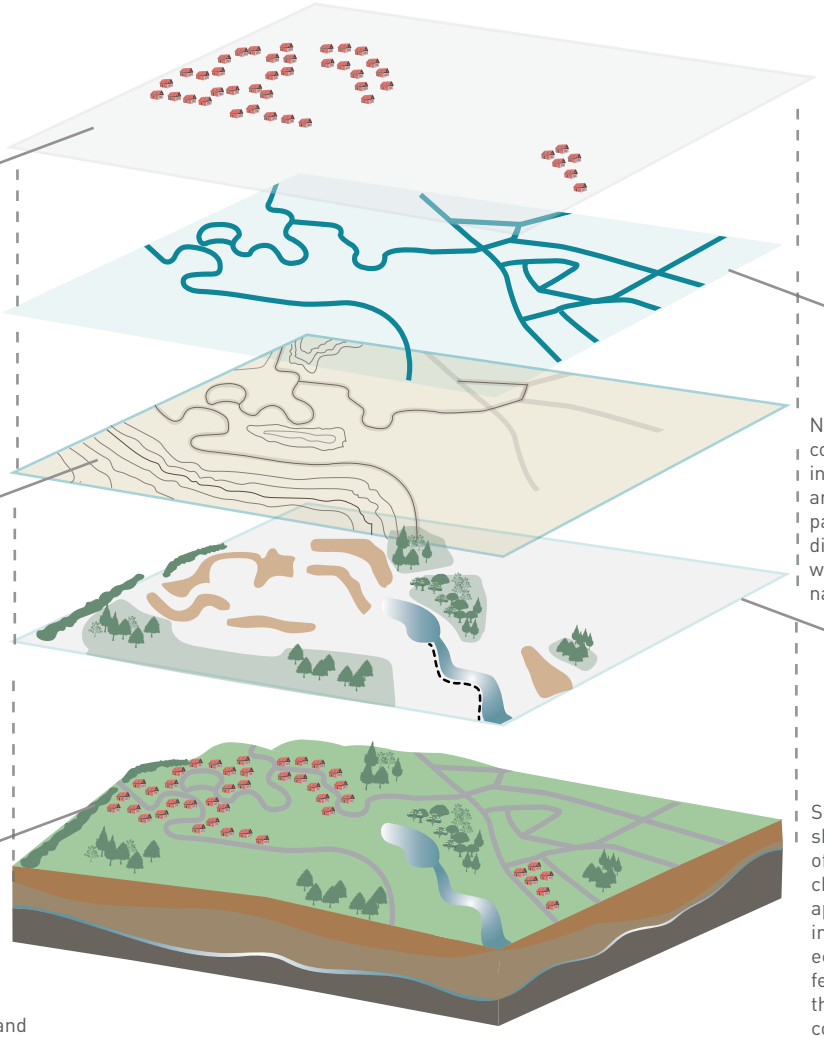
Overview:

Many design decisions, particularly at a strategic level, should be based on the findings of a local character analysis, undertaken as part of a site and context appraisal. Designers of new housing developments should spend time in the local area to understand its distinctive qualities at an early stage in the design process. Good design draws upon local characteristics, either as a direct reference or as a thoughtful response to it. This should be evidenced as part of a planning application. Existing natural features such as streams, rivers, ponds and trees are assets that should inform the layout of development.

Highway designers should:

- Assess the species of plants and trees on site to understand their value prior to designing the layout of the development.
- Use existing natural features on the site to the scheme's advantage - retaining trees and water features can help to create a characterful development.
- Maintain and enhance existing green corridors and local wildlife habitat networks.
- View new and existing public open space as an asset and consider how it can be incorporated and accessed.
- Seek to retain elements which are most critical to the existing aesthetic quality.
- Look carefully at how surface water naturally drains from the site and where water collects after heavy rainfall.
- Identify flood risk areas and design the site layout to minimise risk of damage in the event of flooding.
- Consider whether focal points can be created where there are existing natural features.
- Appraise the topography of the site and consider how development can adapt to it.
- Maintain and create new connections to extend the range of pedestrian and cycle links along public rights of way and greenways.

Site Appraisal



Plots

The distinctive way that buildings are laid out and orientated should integrate development into its natural setting.

Highway

New routes should connect conveniently into existing routes and movement patterns, and be as direct as possible without overriding natural features.

Topography

Scheme layout should be directly influenced by topographical features, and adapt to them.

Land Use

Scheme layout should take account of landscape, i.e. the character and appearance of land, including its form, ecology, natural features, and the way these components combine.

Scheme Layout

The framework of routes and spaces, and the arrangement of streets, plots and buildings, and how they relate to one another, should be driven by topography and existing land uses.

Scheme Design

xix. **Highway layout should be directly informed by the site appraisal and adapt to the natural environment of the site to be developed. A well designed scheme should create a locally inspired or otherwise distinctive sense of character. The edges of a development should be outward-looking, to visually and physically connect a scheme to its surroundings, and also to contribute to the character and legibility of the adjoining townscape.**

Overall proposals should aim to:

- Create a unique identity, informed by early research into the site and its surroundings.
- Use tactile surfacing and a visually contrasting combination of man-made and natural materials to delineate space for cars, pedestrians and crossing points.
- Consider how hard and soft elements can be used to make drivers approach their street and home more cautiously and responsibly.
- Place emphasis on the edges of the site to ensure that important connections with adjoining residential areas are successful.
- Evaluate whether landscaping and planting is required to reduce the visual impact of development and to minimise visual intrusion.
- Think creatively about how built form frontages, public realm and landscaping can reinforce street hierarchies and improve legibility.
- Prioritise pedestrians and cyclists over motorists.
- Anticipate the movement patterns of pedestrians, cyclists and vehicles and what the most desirable/direct routes are likely to be.
- Ensure there is adequate parking provision for cars and cycles and decide where this can be most effectively located.
- Identify routes to local amenities and ensure that these are well sign-posted, safe and pleasant for local residents.
- Knit the development into the surrounding area as much as possible through the layout of roads and footpaths that link to existing highway networks and public open space.
- Incorporate pedestrian and cycle-only routes that are over-looked by dwellings and that link the central point(s) of a development with surrounding amenities and places of interest.
- Make sure that residents can use public transport to access local amenities and the town centre.
- Provide easy access to dwellings for emergency vehicles and refuse collection.
- Envisage how future development could integrate with the proposal.
- Utilise a pattern of road types with a width proportional to building height.

Design & Access Statements:

Design

The process
How the physical characteristics of the scheme have been informed by a rigorous process which should include the following steps:

- **assessment**
- **involvement**
- **evaluation**
- **design.**

Access

The statement needs to include two potential aspects of access. That is not to say they are separate, and the statement should show that all access issues have been considered together.

Vehicular and transport links
Why the access points and routes have been chosen, and how the site responds to road layout and public transport provision.

Inclusive access
How everyone can get to and move through the place on equal terms regardless of age, disability, ethnicity or social grouping.

Use
What buildings and spaces will be used for.

Amount
How much would be built on the site.

Layout
How the buildings and public and private spaces will be arranged on the site, and the relationship between them and the buildings and spaces around the site.

Scale
How big the buildings and spaces would be (their height, width and length).

Landscaping
How open spaces will be treated to enhance and protect the character of a place.

Appearance
What the building and spaces will look like, for example, building materials and architectural details.

Image: CABE

Application Process

xx. An overview of the planning application process with respect to highway design can be accessed here

Design and Access Statements:

xxi. A Design and Access Statement is a concise report accompanying certain applications for planning permission. They provide a framework for applicants to explain how a proposed development is a suitable response to the site and its setting, and demonstrate how a development will be accessed by prospective users. Design and Access Statements can aid decision-making by enabling local planning authorities and third parties to better understand the analysis that has underpinned the design of a development proposal.

They also:

(a) explain the design principles and concepts that have been applied to the proposed development; and

(b) demonstrate the steps taken to appraise the context of the proposed development, and how the design of the development takes that context into account.

xxii. A development's context refers to the particular characteristics of the application site and its wider setting. These will be specific to the circumstances of an individual application and a Design and Access Statement should be tailored accordingly.

xxiii. Design and Access Statements must also explain the approach to access and how relevant Local Plan policies have been taken into account. They must detail any consultation undertaken in relation to access issues, and how the outcome of this consultation has informed the proposed development. They should also explain how any specific issues which might affect access to the proposed development have been addressed.

xxiv. Applicants will be expected to take account of all the applicable elements of the government endorsed publication 'Inclusive Mobility' by following the procedures set out within it and the standards of design it describes. Applicants should document and explain the approaches they have adopted, including any alternative options considered. Inclusive Mobility can be accessed here

xxv. Applicants should also describe how they have sought to address inclusive design requirements. Any deviation from the inclusive design guidance set out within this SPD must be justified within the Design and Access statement.

Design and Access Statements should:

- **Include a statement of compliance with the principles and guidance contained within this SPD;**
- **Identify key issues and constraints;**
- **Reference sources of advice and guidance;**
- **Address principles of inclusive design, and highway maintenance and management;**
- **Demonstrate how inclusive access to the site and facilities will be catered for;**
- **Comprehensively list the inclusive design standards and guidance followed.**

Skelmanthorpe, Denby Dale

1.0 Prioritising Pedestrians

Prioritising Pedestrians

1.1 Streets, shared spaces and parking areas need to be designed to reflect the needs of motorists but not at the expense of any other users, specifically pedestrians. Well-designed streets should be based on the following user hierarchy, and designed as a series of varied and well defined spaces for all users, as well as vehicles:

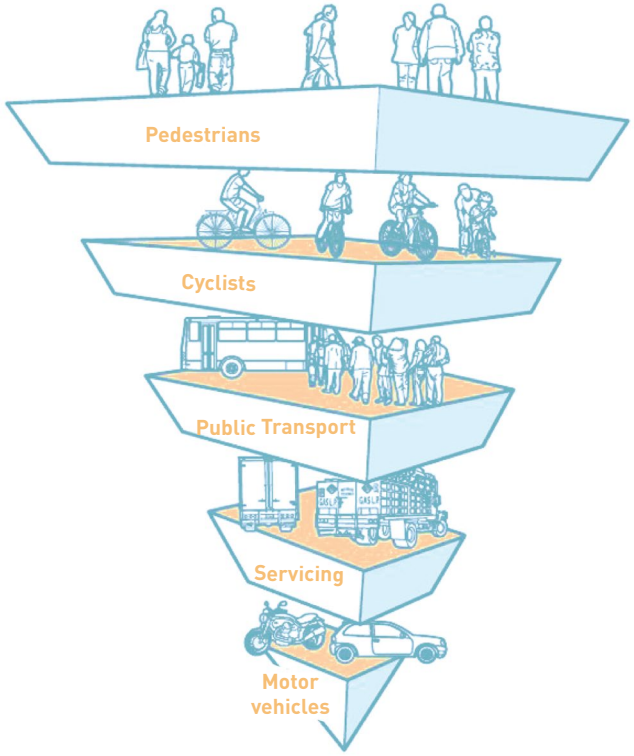


Image: Hierarchy of User Importance

1.2 Pedestrian routes are classified as either footways (adjacent to the carriageway or verge) or footpaths (away from the carriageway). Within new residential areas, pedestrian movement should be convenient, safe, pleasant, and thereby the preferred mode of travel. Street trees can also enhance the pedestrian experience whilst also improving health and well-being.

1.3

1 KEY DESIGN DRIVER

Direct routes should be provided wherever possible to bus stops, local facilities, schools and adjacent neighbourhoods, in such a way that makes it more convenient and attractive to walk than to drive to such destinations.

1.4 The repetition of building types and street patterns can make wayfinding and orientation around residential neighbourhoods difficult. Hence where pedestrian links are provided, they should be as direct as possible, have good intervisibility, be well lit, and provide natural surveillance.

1.5 Bollards, chicanes or similar vehicle mitigation measures should be used to prevent the abuse of pedestrian and cycle links by motorists, whilst still maintaining access for pedestrians, including those with pushchairs and wheelchairs. Any such measures should be well integrated into the landscape design of proposals and visually unobtrusive.

Shared Space:

1.6 Pedestrian movements should also be equally catered for on shared surface streets. Shared space aims to improve pedestrian movement and comfort by reducing the dominance of motor vehicles and enabling users to share the space rather than follow the rules implied by more conventional road priority management systems. Using shared space on streets in residential neighbourhoods (where there will be minimal vehicular traffic) can help to create more child, pedestrian and community friendly streets. The intention is to design streets as places instead of simply corridors for vehicular movement. There is no such thing as a definitive shared space design as every site exhibits uniquely individual characteristics.

1.7 Shared space proposals should**:**

- Create a 'gateway' into the area of shared space that differentiates the space to the main highway. This can be achieved by a speed restriction sign, narrowing of the carriageway/overall street width, vertical change in street surface level and/or contrasting surface finishes from surrounding streets to imply pedestrian priority;
- Incorporate guidance paths to lead pedestrians along safe and logical routes;
- Manage speed through design (to achieve a vehicle speed of between 10 – 15mph, with 10mph preferred);
- Keep the space uncluttered through minimal use of traffic signs and other street furniture;
- Enable the space to be kept free of obstacles by providing accessible and unobtrusive bin presentation points;
- Use tactile warning blister paving to indicate crossings in areas of shared space;
- Highlight uncontrolled crossings by a combination of the following:

  Tonal/visual contrast, bollards to indicate the pedestrian entry to the crossing, a raised table (if not a level surface), narrow pinch points and differently textured surfacing and planting on vehicular approaches to crossings.

Lindley, Huddersfield

Safety & Security:

1.8 Physical measures intended to protect pedestrians from motor vehicles should be used where there is an overriding safety or security issue. Although an integral part of highway design, barriers between the road and pedestrians are visually unattractive, can be a hazard, and also create the impression that the highway is for motor vehicles only. Alternatively, tree and shrub planting can also fulfil this role by creating a physical landscape barrier (see paragraph 4.6).

1.9

KEY DESIGN DRIVER

The government endorsed publication 'Inclusive Mobility' sets out guidance in relation to minimum footway widths, gradients and crossfalls (Sections 3.1 and 3.2), signage heights (Section 10.1.5), steps (Section 8.4) and crossing points (Sections 3.13, 4.1 and 4.2)

Inclusive Design:

1.10 Streets should be inclusive, which means able to be accessed and enjoyed regardless of mobility or age. Inclusive design aims to achieve solutions that create safe and accessible environments for all members of the community. An inclusive design approach also benefits other groups including but not limited to older people, people with temporary impairments, large families and parents with young children.

1.11 Inclusive design acknowledges diversity and difference and is more likely to be achieved when it is considered at every stage of the design and development process, from pre-planning to completion. However it is often mistakenly seen as a pre-commencement issue, which can be addressed once planning permission has been granted, rather than before the planning application stage. The most effective way to overcome conflicting policies and to maximise accessibility for everyone is for all parties to consider inclusive design from the outset of the design process.

1.12 Inclusive Mobility sets out standards for inclusive design in greater detail:

Inclusive Mobility References

- **Steps (Section 8.4.1)**
- **Ramps (Section 8.4.2)**
- **Footway gradients and crossfalls (Section 3.2)**
- **Footway widths (Section 3.1)**
- **Lighting (Section 11)**
- **Street furniture (Section 3.7)**
- **Resting points (Section 12)**
- **Signage (Section 10)**

Surfacing:

1.13 Surface finishes can render an accessible route inaccessible. However, it is possible to improve accessibility and provide valuable information for disabled people by choosing the correct materials, particularly those with colour and texture. The best type of surface is smooth, firm and slip resistant. Surfaces must be hard enough so that wheels and sticks do not sink into them. Packed surfaces such as crushed rock, gravel, sand or grit are generally unsuitable.

Tactile paving:

1.14 Tactile paving is used to warn visually impaired people of hazards in the environment. The main use of tactile paving is to identify level changes (steps/stairs), pedestrian crossings, and to differentiate cycle lanes from pedestrian footways. With regard to the layout of tactile paving, reference should also be made to the detailed guidance developed by the Department for Transport (DfT) including, 'Guidance on the use of tactile paving surfaces'

Blakeridge Mill, Batley

1.15

Inclusively designed footways and footpaths should:

- Be even, firm, well drained and non-slip in both wet and dry weather conditions;
- Be durable, easily maintained, and well lit;
- Have a minimum pendulum test value (PTV) of 40[2];
- Be installed with any necessary joints closed and flush to prevent small wheels, walking sticks and canes becoming trapped;
- Have a surface that is even and stable, with any variation of surface profile not exceeding ± 5mm (e.g. between paving, surface features or different surfaces);
- Have well defined edge treatments such as planting, a change of textures, or the use of kerbs (minimum 60mm) to help indicate to visually impaired people the extent of the path;
- Have a visually contrasting surface to their surroundings;
- Have a cross fall no greater than 1:50 (2%);

Covers and gratings within walking areas are to:

- Be flush and non-slip;
- Have slots no greater than 13mm wide, with the diameter of circular holes in gratings being no more than 18mm;

Footways and footpaths are not to use:

- Busy patterned surfaces or highly reflective strips that can cause confusion and disorientate people with a visual impairment or learning disability.

2.0 Cycling Infrastructure

Dewsbury Learning Quarter

Cycling Infrastructure

2.1 Cycle routes in developments should meet the same basic criteria as pedestrian routes; namely convenience, connectivity, safety, attractiveness, and directness. Cycle linkages between key areas within a development and around it should always be considered and therefore designed into a scheme from the start, with particular attention to routes to schools, local facilities and neighbouring areas. Developments can facilitate new infrastructure for cyclists that links to existing and intended routes; as shown on the Local Plan Policies Map.

Huddersfield Town Centre

2.2

3 KEY DESIGN DRIVER

Evaluating how cyclists are best provided for in a development should be addressed within the planning application and informed by the detailed guidance within:

a) Local Transport Note (LTN) 2/08: Cycling Infrastructure Design (https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-208)

b) Making Space for Cycling: A guide for new developments and street renewals (2nd Edition 2014) (www.makingspaceforcycling.org)

c) Sustrans Design Manual (2014): Handbook for cycle-friendly design (https://www.sustrans.org.uk/sites/default/files/file_content_type/sustrans_handbook_for_cycle-friendly_design_11_04_14.pdf)

2.3 **The Sustrans Design Manual outlines:**

- A summary of the key principles and processes to be followed in order to create a user-focused design
- Wider considerations of urban design and other measures to improve the general highway design for cyclists and pedestrians
- On-carriageway provision for cyclists on links and junctions

- Cycle provision off the carriageway, whether cycle tracks alongside the road or traffic free routes away from the road (including crossings)

- How safe and secure cycle parking can be incorporated into the public realm and street furniture

- Associated design issues including signing, integration with public transport, and the design of new developments

- The maintenance and management of routes

2.4 The publication 'Making Space for Cycling' also outlines design principles and solutions for cycling provision and the many benefits to be gained from designing developments with cycling in mind: http://www.makingspaceforcycling.org/MakingSpaceForCycling.pdf

Huddersfield Train Station

Image: Falco

2.5 **Access controls:**

Where off-road cycle tracks are installed away from the carriageway, access measures should be used where necessary to prevent unauthorised access by cars or motorcycles. All access barriers must comply with Disability Discrimination Act (DDA) regulations and should only be installed if abuse is considered likely, and after consultation with potential user groups has been carried out. If the pedestrian and cycle routes are parallel but segregated by level difference, the preferred widths are 2 metres for the pedestrian route and 2.5 metres for the cycle track. Further guidance is provided within LTN 2/08. Soft landscaping and tree planting can also be used effectively to control access.

Visibility:

2.6

4 KEY DESIGN DRIVER

a) Where a cycle track joins a carriageway, an appropriate x-distance must be provided with a normal minimum of 2.4 metres. Where a crossing or a junction with a carriageway is approached by means of a physical barrier arrangement the x-distance can be reduced to 1.0m.

b) Further details can be found in DMRB 6/3 Part 5: http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol6/section3/ta9005.pdf

3.0 Streets

Huddersfield Town Centre

Streets

3.1 This SPD aims to facilitate good highway design that has due regard to statutory regulations, road safety, and the place and movement principles set out in Manual for Streets: https://www.gov.uk/government/publications/manual-for-streets, as well as other best practice guidance such as Transport for London's Urban Motorcycle Design Handbook - see Appendices and (http://content.tfl.gov.uk/tfl-urban-motorcycle-design-handbook.pdf). Guidance that is overly prescriptive can inhibit innovation and prevent development from reflecting local character and distinctiveness. For this reason the Council welcomes a flexible approach that embraces innovation in highway design. This approach places greater responsibility on the applicant to justify the choices made during the design process, particularly in the context of future operation and maintenance. This chapter covers Residential Streets capable of adoption, Private 'Non-Adopted' Streets or Drives, Industrial/ Commercial Developments, and Mixed-Use Developments.

Residential Street Types and Hierarchy:

3.2 Within new residential areas, streets need to accommodate various types of movement in a safe and convenient way. The needs of motorised traffic must be balanced with those of pedestrians of all ages and abilities, cyclists, and users of public transport. Highway designs should correspond to a street's intended function, and adapt to where that function changes along its length. Streets should also be designed so that they respond to their context. To achieve this it is important that new residential streets form part of a hierarchy that is clear and legible to all users who share the same space.

3.3 This hierarchy should provide an understandable transition from distributor roads where motor vehicular space requirements may be more dominant, to residential streets where the needs of pedestrians and other non-car users are of greater importance. Linked streets that allow greater connectivity and accessibility by foot and cycle are encouraged. Developers should therefore avoid sinuous layouts with branched cul-de-sacs, and discourage through-traffic using residential streets as a short cut.

3.4 This chapter provides guidance on how to design the adoptable residential street types outlined below. It aims to maximise the overall range of design choices that are possible within each street category, thus enabling the overall adoptable 'corridor' (including carriageways, footways and other areas) to reflect and enhance an overall design, rather than control it:

- Street Type A: Residential Connector Street
- Street Type B: Local Residential Street
- Street Type C: Shared Surface Street

3.5

KEY DESIGN DRIVER

If there is the possibility that a street will serve further properties in the future, for instance if there is an adjacent allocated site which is likely to be developed (and accessed through the first site) then the streets should be designed to the appropriate standard, or be capable of being altered in the future. In order to 'future proof' a street layout, no 'ransom strips' or other gaps should be left between the adopted highway and a site boundary.

3.6 Whilst some form of street hierarchy is necessary to construct a network which is understandable for users, caution should be applied in the rigid application of a hierarchy based exclusively on vehicular movement. An alternative approach is proposed within Manual for Streets (MfS-paragraph 2.4) that is based on the balance between place and movement. It states that streets should no longer be designed by assuming 'place' to be automatically subservient to 'movement'. Both should be considered in combination, with their relative importance depending on the street's function within a network. Inevitably, designs for streets within the same typology will differ, as they will depend on the extent to which a street is situated within the vicinity of shops, bus stops, playgrounds, public open spaces and amenity areas (and whether it provides access to natural play spaces, greenways or wildlife habitats).

3.7 Table 1 (right) outlines design parameters based upon the number of dwellings to be served from a street. This should be considered as a starting point, with the subsequent choice of design elements reflecting the wider function of the street and place/movement principles. With respect to design speed, MfS (paragraph 7.4.2) recommends a maximum of 20mph. Therefore it is considered that a design speed of 20mph would be appropriate for Type B (Local Residential Streets). Designers will be required to demonstrate how proposed street layouts will achieve the selected design speed in practice as part of a Stage 1 Road Safety Audit.

3.8 The Council encourages developers to construct highways to a standard that the Highway Authority can adopt via Section 38 of the Highways Act. To ensure a smooth transition through the planning and adoption processes (see Appendix 7.4), the Council will cooperate with developers at pre-application stage to facilitate the approval of highway design details reserved by condition. To be acceptable for adoption by the Council, residential streets should be designed to comply with the following range of requirements:

Table 1: Summary of Residential Street Types

Type	A	B	C
Title	**Residential Connector Street**	**Local Residential Street**	**Shared Surface Street**
Potential number of dwellings	300 - 700	200 - 300	An amount generating no more than 100 VPH
Alignment	Curvilinear	Curvilinear	Angular with alignment shifts
Design speed	25 mph	20 mph	15 mph
Speed restraint feature separation (Maximum)	100 metres	60 metres	40 metres
Forward visibilities (Minimum)	33 metres	25 metres	23 metres
Centreline radius (Minimum)	35 metres	20 metres	Based on vehicle tracking
Cross -section	2 metre footway – verge – carriageway – verge – 2 metre footway	2 metre footway - carriageway - 2 metre footway	hard margin - carriageway - hard margin
Carriageway width (Minimum)	6.75 metres	4.8 - 5.5 metres (5.5 metres for 50+ units)	4.8 – 5.5 metres
Crossfall	Balanced either side of centreline	Uniform fall across carriageway	Uniform fall across carriageway
Pedestrian provision	Segregated	Segregated	Shared
Verges	1.2 metre grassed verge between footway and carriageway on both sides	Desirable but generally not required	0.6 metre wide hard margin on both sides (except where a footway is provided)
On-street parking	On-street parking to be provided by laybys and carriageway widening	On-street parking to be provided by laybys and carriageway widening	On-street parking to be provided by laybys and carriageway widening

Street Type A (Residential Connector Streets):

3.9 These are the main streets that provide structure for new residential development and connect it to the surrounding urban fabric and highway network. Connector Streets can provide a transition between the surrounding major roads and the more pedestrian dominated Local Residential Streets (Type B). Connector streets provide the primary vehicular access to an area, and link with other street types within new development to form the backbone of a permeable network of streets for pedestrians and cyclists. It is likely that this street type would also carry the majority of bus traffic through any new development.

3.10 For developments over 300 dwellings, at least two points of vehicular entry/exit are preferred to maximise accessibility, connectivity, and efficient operation in emergencies. Although the provision of more than one access is encouraged, in exceptional circumstances, where this is not possible, a single vehicular access may be accepted providing that the access and internal network form a loop that is of a suitable width; with the shortest possible distance between the top of the loop and the point of access. Cul-de-sac layouts will normally be discouraged, unless deemed absolutely necessary due to exceptional circumstances. The Council welcomes early engagement on the types of layout that prospective applicants wish to propose.

3.11 For connector streets, a verge or hard margin between the footway and carriageway should be provided to increase separation between vehicles and pedestrians. Planting trees in this zone can increase perception of this separation, and will 'green' the street environment. Certain types of vegetation can affect safety (i.e. visibility on bends and at junctions); thereby only appropriate street tree species with fastigiated form, small leaves, slender trunks and higher foliage, should be planted alongside the carriageway where safety is a concern.

Street Type B (Local Residential Streets):

3.12 These are the general streets within residential areas that carry a wide range of movement, provide the main setting for new homes, and allow direct access to individual dwellings. Local residential streets will be used by service vehicles, and the requirements of these vehicles will need to be accommodated, although should not over dominate. Layout and on-street parking will also need to be appropriately designed and controlled.

3.13 Local residential streets may provide access (depending on the scale of development) directly onto the existing external network, or onto a Connector Street (Type A) before reaching the main road network. These streets are unlikely to carry large volumes of traffic or bus routes, meaning that geometry requirements can vary as a result, thus allowing for increased on-street parking and the incorporation of street trees to provide a more natural setting.

Street Type C (Shared Surface Streets):

3.14 This street type has shared surfaces (for pedestrians and motor vehicles) and is designed to accommodate slower speeds, which should be self-enforcing through good design. Pedestrians can safely share the whole street with vehicles; however designated pedestrian routes should still be available for more vulnerable pedestrians, e.g. elderly people, disabled people and those with children. It is more appropriate if shared surfaces have different surfacing to Type A and B streets (e.g. block paving) and incorporate different surface materials to delineate the different functions of the highway at different points. Street tree planting can also be

incorporated within shared surfaces to break up large swathes of hard surfacing. Care should be taken to coordinate street lighting and street tree planting locations to ensure that shared surfaces are adequately lit and that trees do not conflict with on-street car parking provision as they grow.

Private 'Non-Adopted' Streets or Drives:

3.15 New development serving more than 5 dwellings (or any existing private road which will serve more than 5 dwellings after completion of new development) should be laid out to an adoptable standard and be able to be offered for adoption. The Council does not normally adopt developments of 5 dwellings or less.

3.16 Developments (in excess of 5 dwellings) with appropriate layouts may be considered acceptable to be served by private driveways under certain conditions. These are outlined below:

i) The developer agrees (with the Council) the principle of the roads remaining private;

ii) The developer agrees the long-term maintenance programme for the highway infrastructure;

iii) The developer agrees how the entrance to the private development is to be defined on site;

iv.) The highway infrastructure is designed and constructed to adoptable standards in all respects.

3.17 Whilst private streets and drives can often deliver a higher standard of materials than may be achievable with an adopted street, the following potential implications should still be taken into account:

- Future maintenance liabilities;
- Public liabilities;
- Street cleansing;
- Access for refuse collection vehicles, communal bin stores, individual bin presentation points;
- Grit bin provision;
- Drainage;
- Lighting;
- The Council has no powers under the Highways Act;
- The Police has no powers to remove obstructions.

3.18

KEY DESIGN DRIVER

To ensure that residents can access their properties, a private drive serving 5 dwellings or less should be 4.5 metres wide and a minimum of 5 metres long (if access is to be from a Type A Street or a more major route). This will allow vehicles to turn in and turn out. Carriageway widths after that point should be designed to respond to built form and operational requirements.

3.19 The horizontal alignment and need for passing places should be based upon practical requirements and vehicle tracking where necessary. It should be noted that a refuse vehicle needs to be able to get within 25 metres of all drive-ends or communal storage locations, and a fire tender needs to be able to get within 45 metres of all rear dwelling entrances. If these distances cannot be achieved, on-site turning facilities will be needed.

Industrial and Commercial Developments:

3.20 To be acceptable for adoption by the Council, industrial and

commercial estate roads should be designed to comply with the following range of requirements:

Table 2: Summary of Industrial/Commercial Street Types

Type	CA	CB
Title	Major Industrial Commercial Road	Minor Industrial Commercial Road
Size of development	Up to 20 ha	Up to 8 ha
Alignment	Curvilinear	Curvilinear
Design speed	25 mph	25 mph
Speed restraint feature separation (Maximum)	120 metres	120 metres
Forward Visibilities (Minimum)	33 metres	33 metres
Centreline Radius (Minimum)	35 metres	35 metres
Cross -section	2 metre footway - segregated cycle lane - carriageway - segregated cycle lane - 2 metre footway	2 metre footway - segregated cycle lane - carriageway - segregated cycle lane - 2 metre footway
Carriageway Width (Minimum)	7.3 metres	7.3 metres
Crossfall	Balanced either side of centreline	Balanced either side of centreline
Pedestrian Provision	Segregated, with wider footways on busier sections.	Segregated, with wider footways on busier sections.
On-street Parking	Optional	On-street parking to be provided by laybys and carriageway widening

3.21 Industrial and commercial streets will be more intensively focused towards vehicular movements than residential areas, given the volume and type of traffic expected to use these streets. Nevertheless, the needs of other street users should still be given equal consideration. Particular attention should be given to HGV/cyclist interaction, as segregated and/or dedicated cycle routes may be required. Direct, safe and convenient pedestrian routes should also be provided to and from premises to public transport stops, with the latter incorporating pollution resistant trees and shrubs to improve drainage, air quality, and visual amenity; thus creating a more pleasant environment for pedestrians.

3.22 Major industrial and commercial roads (CA) designed in accordance with the standards set out in Table 2 will serve industrial or commercial developments up to 20 Hectares. Above this level, roads will need to be designed in accordance with the Design Manual for Roads and Bridges (http://www.standardsforhighways.co.uk/ha/standards/dmrb/). When designing industrial and commercial estates applicants should try to produce a layout which is self-contained and which segregates industrial uses from local/residential traffic. Minor industrial roads (CB) serve industrial or commercial developments of up to 8 hectares (or an industrial building with a gross floor area of 40,000 square metres) and provide direct frontage access to individual premises. Where a minor industrial road is intended to serve a mainly B1 office development (with a very low number of HGV movements) there may be flexibility to vary the above requirements through discussions with the Council.

3.23 It is common for industrial units to be sited around a central turning area; with each unit having its own forecourt for loading and parking. Where additional staff car parking is required, this is normally provided in a communal area, which is conveniently

located. In order to ensure that industrial layouts function properly, a minimum of two staff car parking spaces should be provided per unit. The shared turning head should be a minimum of 25m (radius) to enable either a 10m rigid or 16.5m articulated vehicle to turn clear of the individual unit forecourts. A forecourt of depth of at least 7 to 10m should be provided, with a 600mm overhang strip around the extent of the adoptable or private industrial road. Where units of a greater floor area are proposed, forecourt depths must be increased to accommodate the larger vehicles expected to visit the development. Table 3 below indicates Unit Floor Area to Forecourt Depth requirements.

Table 3:

Unit Floor Area (m2)	Forecourt Depth (m2)
Up to 50	7
51 to 150	10
150 and above	16.5

3.24 The Council will not support the installation of security gates on adopted highways; however these may be permissible in the case of private courtyards. Where gates are proposed they should be set back a minimum of 16.5m from the adopted highway boundary to allow commercial vehicles to pull off the highway.

Mixed-Use Developments:

3.25 Planning policies encourage mixed-use developments (i.e. residential and commercial units) that are served from the same access. The Council will apply highway design standards flexibly when considering mixed-use proposals. Connector streets (Type A) can be designed to accommodate a mix of residential and commercial traffic where necessary. Moreover, carriageway widths and other standards will be partly dependent on the percentage of larger vehicles that are expected. The point at which a mixed-use development should be designed as an industrial or commercial road should be discussed with the Council before a planning application is submitted. To ensure the safety of pedestrians it is recommended that a separate footway be provided where pedestrian movement is likely. This might need to be situated between the existing highway and the site, and/or within the courtyard itself. Private parking areas and forecourts should be properly drained and delineated with trees to help mitigate against any noise or visual impacts. Careful consideration should be given to tree positioning in order to ensure that CCTV and security lighting remains unobstructed as they grow. Applicants are also encouraged to utilise permeable surfacing materials such as grasscrete to reduce surface water run-off. Unsealed and loose materials such as hard-core, crushed stone or gravel are not considered acceptable. Early consideration should be given to waste collection access and storage points to ensure they are a suitable size and will not conflict with car parking provision.

Carriageway Widths:

3.26 The ease, and the speed, with which vehicles may move along highways depends in part upon the tolerances available both between vehicles and between vehicles and kerbs. On the external highway network (where maintaining traffic flow is of high priority and where drivers expect to be able to travel at speeds over 37mph) carriageway widths should be in accordance with the recommendations outlined within the Design Manual for Roads and Bridges (http://www.standardsforhighways.co.uk/ha/standards/dmrb/).

3.27 On residential streets however, where traffic flows are light and where journeys are starting or ending, drivers may be expected to accept smaller tolerances consistent with the aim of restraining vehicle speeds and encouraging careful driving. Whether or not smaller tolerances will cause unacceptable delay, reduce safety, or result in damage to footways and verges, will depend upon the types and volumes of traffic, the design of the carriageway surrounds, and the distances over which drivers have to proceed. These factors may vary considerably within a layout. The desirable design dimensions for new or improved streets are outlined in Table 1 and take into account the functions of the street and the type, density and character of residential development proposed. N.B. A commuted sum is sometimes required for adoptions. This is calculated in accordance with guidance issued by the DfT. The value of commuted sums will be determined by the Council on a site-specific basis. Details will be provided to the developer in advance of entering into the appropriate agreement (e.g. Section 38 or 62) with the Council. Likely elements for commuted sums include: Bridges; Soakaways; Planting; Grassed areas; and Structures within the highway.

Ainley Top, Huddersfield

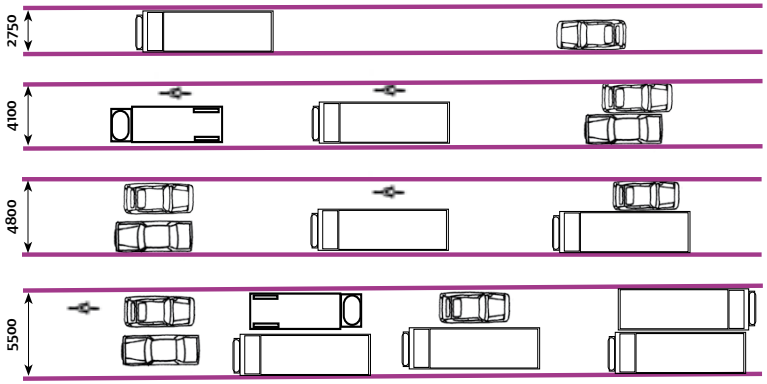
3.28 Swept path analysis can be used to determine the space required for various vehicles and is a key tool for designing carriageways for vehicular movement within the overall layout of the street. Swept path analysis (vehicle tracking) often proves beneficial in determining how vehicles will move within a street. Notwithstanding, it is important to recognise that the potential layouts of buildings and spaces should not be dictated by carriageway alignment. For example, designers can vary the space between kerbs or buildings as the kerb line does not need to follow the line of vehicle tracking if careful attention is given to the combination of sightlines, parking and pedestrian movements.

3.29

7 KEY DESIGN DRIVER

The typical minimum width of adopted highways is between 4.8 and 5.5 metres. This allows all vehicles to pass each other with ease given the infrequency of large vehicles on residential streets. This width is only sufficient to cope with typical residential traffic provided that sufficient off-street parking is available. Carriageway width should also provide for pedestrians, crossing points, cyclists, on-street parking and servicing.

3.30 Where large vehicles such as removal lorries require access, passing places may be required. The carriageway width required between passing places will then depend upon the combinations of vehicle types expected; the frequency with which vehicles may meet each other and the delay that may be caused to traffic movement.



Junction Spacing:

3.31

8 KEY DESIGN DRIVER

The geometry of new junctions (either onto the existing external highway network or within a development itself) must take into account both the type of traffic on the minor route, and also the existing (or likely future) traffic flows and speeds on the major route. The number of new accesses, junctions, and private means of access will be restricted in the vicinity of sites that generate high pedestrian flows (e.g. schools).

3.32

As a general principle junctions should be avoided near the crest of a street, or on a bend, unless adequate visibility, sightlines and other safety features can be achieved. The need for and provision of junctions on new highways, and additional junctions on existing routes, should be assessed in the context of a wide range of factors such as the need for access at particular locations, the impact on the size of development parcels, the potential for interaction between adjacent junctions, and the consequent effect on user delay and road safety. A minor route should ideally meet the major route perpendicular for the first 10m.

Table 4: Junction spacing recommendations

	Consecutive	Staggered (see notes)
Major road network – 40 mph limit	120 metres	60 metres
Major road network – 30 mph limit	90 metres	45 metres
Type A (Residential Connector)	45 metres	22.5 metres
Type B Street (Local Residential)	33 metres	16.5 metres
Type C (Shared Surface)	Design dependent	Design dependent
Type CA (Major Industrial)	60 metres	30 metres
Type CB (Minor Industrial)	60 metres	30 metres

Notes: Right-left staggered junctions are preferred, as they generate fewer conflicting movements. Crossroads would be considered on Type C streets.

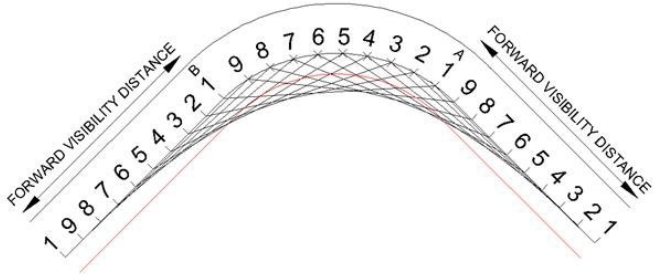
Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
SSD (metres)		9	12	15	16	20	22	31	36	40	43	56
SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59

3.33

Manual for Streets (MfS) introduced amended visibility guidelines (above) on routes within built-up areas having vehicle speeds of 37 mph or less. For the purposes of this SPD, the MfS recommended visibilities are considered appropriate in the following circumstances:

i) Within new residential developments themselves
ii) The proposed or existing access junction onto the external highway network, where the major route meets all of the following in the vicinity of the junction:-

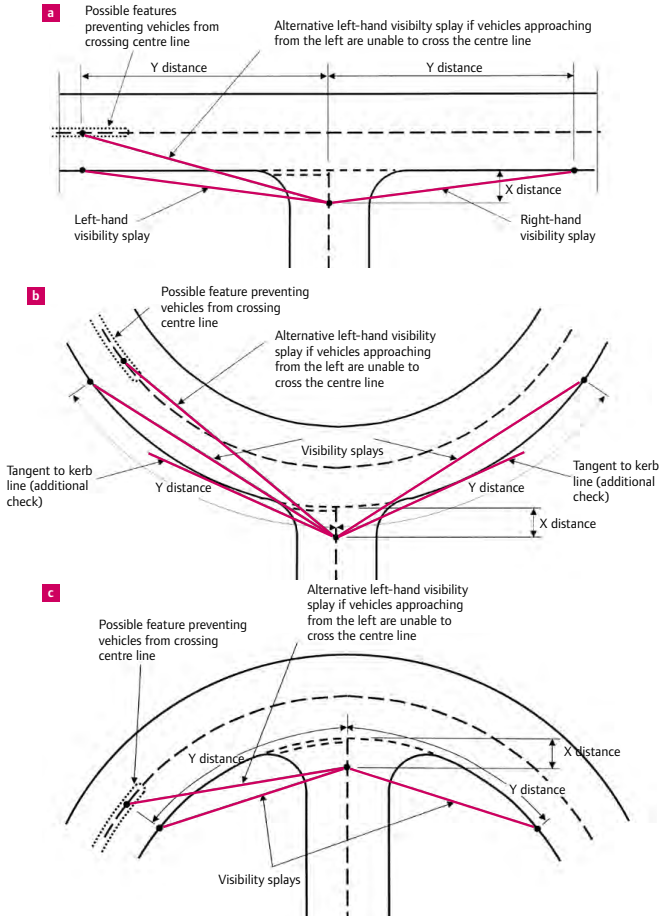
a) It is within a built-up area;
b) The place function of the street is more important than the movement function;
c) It does not exacerbate existing design deficiencies that adversely affect safety.



3.34 The question of whether a particularly location is "built up" will need to be considered. In general terms it relates to an area where there is development on at least one side of the carriageway, with accesses, junctions, activity and other features which will clearly influence driver behaviour and speed. For routes that carry over 10,000 vehicles per day and/or have vehicle speeds greater than 37mph, the visibility guidelines within the Design Manual for Roads and Bridges (DMRB) should be followed: http://www.standardsforhighways.co.uk/ha/standards/dmrb/index.htm

Visibility:

3.35 When preparing proposals, forward visibility should be measured in accordance with the above diagram and Manual for Streets 2 (see page 75). The measurement of X and Y distances is shown on the diagrams below and explained in MfS 2 (page 78). Y distance should be based on the recommended Stopping Sight Distance (SSD) guidance within MfS 2 (pages 73 to 75) and the table above paragraph 3.33. Additional guidance regarding visibility along the street edge and obstacles to visibility can be found within MfS 2.



3.36

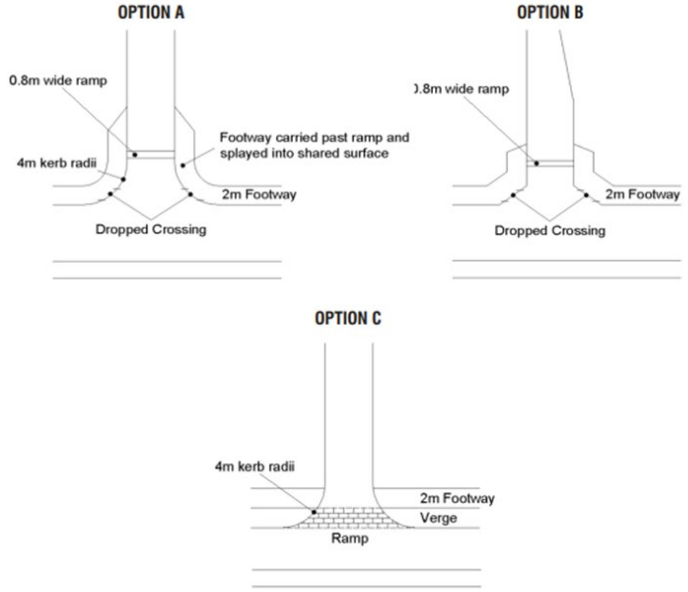
Table 5: Recommended radii and visibility requirements for junction layouts:

Priority Route	Non-Priority	Radius (minimum) see note (a)	X-Distance (minimum) see note (b)	Y-Distance (minimum) see note (c)
Major Road	Type A	10m	2.4m	See note (c)
	Type B	10m	2.4m	See note (c)
	Type C	4 metres or see note (e)		
Type A	Type A	6m	2.4m	25 or 33m
	Type B	6m	2.4m	25 or 33m
	Type C	4 metres or see note (e)		
Type B	Type B	6m or splays - see note (d)	2.4m	25m
	Type C	4m or see note (e)	2.4m	25m
Type C	Type C	4m or splays – see note (d)	2.4m	17m
Major Road	CA	15m	2.4m	See note (c)
	CB	15m	2.4m	See note (c)
Major Industrial Road (CA)	CA	15m	2.4m	33m
	CB	10m	2.4m	33m
Minor Industrial Road (CB)	CB	10m	2.4m	33m

Notes
a) The kerb radii given are typical values, but are subject to variation depending on street types and widths. The 15 m 'CA' radii can be reduced where the development comprises mainly offices. As a principle, radii should be minimized to assist pedestrians, and should be checked using vehicle tracking.
b) The 'X' distance will depend on the level of development proposed and may need to increase to 4.5 metres.
c) The 'Y' distance is dependent on the 85th percentile wet weather speed of vehicles on the major road if they are available. If not, then the existing speed limit or the design speed of the road should be used. Any proposals to reduce the 'Y' distance will only be considered if appropriate speed management measures are proposed, they form part of a wider scheme, and are considered appropriate.
d) For these junctions, the entrance curves may be replaced by a more angular, splayed arrangement.
e) A junction between a Type C street and a road with footways should incorporate a dropped crossing. This emphasises to drivers that they are entering a different type of street. Busy major roads should connect with a conventional 4 metre corner radii and incorporate a ramp 5-12 metres from the tangent point. See paragraph 3.37.

3.37

Shared surface junctions can be in the form of any of the arrangements shown below. Option A should be used where there is a need to get vehicles off the priority route as quickly as possible. If Option C is used for a junction onto a Type A street, then the ramp will need to be set back 5 to 12 metres from the tangent point to ensure that cyclists and motorcyclists can traverse the ramp in a straight line and thereby manoeuvre safely.



3.38

The junction of a shared private drive onto a Type A, B and C can be formed using a dropped crossing. On higher standard routes, ideally a 4.0 metre radii should be provided. Where access is taken from a Type A Street or a higher standard route, the initial 5 metre section of shared Private Drive should be 5.0 metres wide.

Speed Restraint:

3.39 To ensure that the design speeds identified for each type of street are not exceeded, it may be necessary to design self-enforcing speed restraint measures into development from the outset. The speed of vehicles is a key factor in improving road safety and minimising future potential accidents. There is a significant lowering of the severity of accidents involving pedestrians and other vulnerable road users when the speed of the vehicle involved is less than 20mph.

3.40

KEY DESIGN DRIVER

All Connector streets (Type A) should be designed to control speeds to 25 mph. Local Residential Streets (Type B) should be designed to be self-enforcing to keep speeds below 20mph and Shared Surface Streets (Type C) below 15 mph. Retrospective speed restraint relies on the introduction of engineered measures to slow vehicles down. In order to avoid this, speed restraint should be considered an integral part of the overall design process and addressed as part of a Stage 1 Road Safety Audit.

3.41 A driver's perception of a safe speed is also materially affected by the spacing, form and proximity of the buildings served by the street, plus the surface materials and hard and soft landscape elements used. Natural speed reducing features which respond to the built form and layout of a development should be used wherever possible to help prevent traffic infrastructure dominating the visual appearance of the street. Closing speeds also need to be taken into account in locations where the carriageway is not wide enough to accommodate the two-way passing of vehicles. Trees, bollards, level changes and contrasting street materiality are just some elements which can be combined to slow traffic.

3.42 Although not exhaustive, typical examples of speed restraint measures that may be considered appropriate are set out in Manual for Streets (Page 88, Paragraph 7.4.4): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

3.43 Other complementary measures which would not qualify exclusively as formal speed restraint measures, but that can be combined with formal measurements to assist in encouraging reduced vehicle speeds as part of a comprehensive series of measures, include:

- Vertical elements such as trees, bollards and street furniture;
- Contrasting textured surfacing (N.B. the materials used should be carefully considered to respond to the built context of the development and allow for effective future maintenance).

3.44 The design of speed restraint features should be informed by consultation with emergency and public transport services. When proposing the integration of speed restraint features, applicants should carry out this consultation and provide consultation responses alongside their application.

Vertical Alignment:

3.45 Streets should follow the topography of a site to avoid an unnatural appearance; however there may be occasions when this is not possible for safety or design reasons. The introduction of cuttings or embankments in such circumstances must be well integrated into a site's topography, with any retaining structures

complementing the overall palette of materials. Cuttings and embankments that are battered back to a stable angle and landscaped are preferable to the introduction of retaining structures.

3.46

10 KEY DESIGN DRIVER

a) The desirable maximum carriageway longitudinal section gradient on all adoptable Street Types is 1 in 20 (5%). If this is not achievable then the specific circumstances should be discussed with the Council in order to address potential mobility and safety implications. A gradient no steeper than 1 in 10 (10%) is preferred. The gradient of a non-priority route on the approach to a junction should be a gradient of 1 in 40 (2.5%) for the initial 10 metre length with an absolute maximum of 1 in 25 (4%).

b) With regard to mobility, 1 in 100 (1%) is never an obstacle, 1 in 50 (2%) can be managed by most people (and also provides good drainage), 1 in 40 (2.5%) can be managed by the majority people, but gradients steeper than 2.5% prove impossible for many manual wheelchair users.

3.47 The minimum general gradient for adequate drainage is normally 1 in 80 (1.25%), including block paved carriageways. Between 1 in 80 and 1 in 200 (0.5%) channel blocks are required, but these are not appropriate for Type C Shared Surface Streets. The minimum gradient that the Council will adopt is 1 in 50 (2%).

3.48 The preferred carriageway crossfall is 1 in 40 (2.5%), although where there is sufficient design justification (e.g. to minimise impact on adjacent trees) this can be increased to an absolute maximum of 1 in 25 (4%). Grade changes across the centreline should be designed to be no more than 5% unless an alternative acceptable solution is proposed.

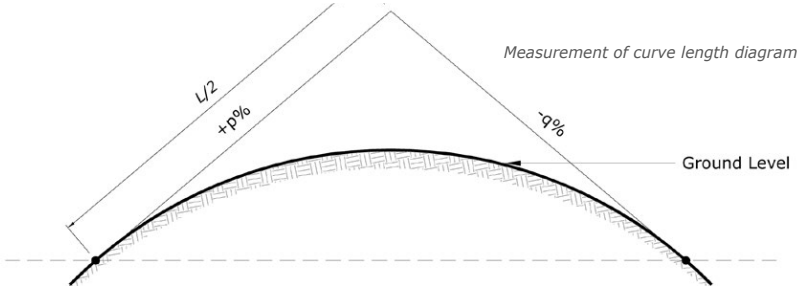
3.49 Vertical clearance (headroom) of 5.3 metres will normally be required over the full carriageway width, plus 450mm to either side. A minimal vertical clearance of 4.2 metres will be allowed for Type C streets where access is via an archway. Further advice on vertical clearance is included in Chapter 6 of the DfT document TD/27/05 'Cross Sections and Headrooms': http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol6/section1/td2705.pdf

3.50 Where a change of gradient occurs, vertical curves will be required at sags (valleys) and crests (summits) for driving comfort and to provide adequate forward visibility. The maximum gradient of drives to individual garages is normally 1 in 10 (10 %).

3.51 The required length of a vertical curve is calculated using the formula L=KA, where L is the length of the curve (in metres), A is the algebraic difference in gradients (expressed as a percentage), and K is taken from the following table:

Table 6:

Street Type	Design Speed (mph)	Minimum K Value	Minimum Curve Length
A: Residential Connector	25	6.5	30 m
B: Local Residential	20	3	20 m
C: Shared Surface	15	2	20 m



Measurement of curve length diagram

3.52 The lowest point of any adoptable carriageway should be 600mm above the 1 in 100 year flood level. If there are justifiable reasons why this level is not achievable, these should be discussed with the Council.

Construction and Materials:

3.53 Good highway design and construction can enhance the character of new development by contributing to the attractiveness of its appearance. The materials selected should combine to form a cohesive palette, and exhibit tones and textures that reflect or complement those used in the local area. The future maintenance of materials should also be considered, with the number of different materials kept to a minimum. There will need to be a more coordinated approach on larger sites where several developers may be present, particularly at the interface between different development plots.

Proposals should:

- Use materials that complement dwellings and surroundings;
- Use materials which are durable, adaptable and sustainable (see the 'Highway Design Principles' within the introduction);
- Avoid the over-use of tarmac;
- Break up tarmac highways with other materials, e.g. occasional strips of granite or stone cobbles;
- Create environments that support use by people with visual impairments.

3.54 Using the same colour tarmac for driveways, footways and highways has the effect of 'joining together' the floorscape from house to house across the street, making the street feel wider than it is and out of scale with pedestrians. Tarmac is usually associated with highways and therefore it is encouraged that alternative materials are considered for footways and driveways to help break up the streetscape.

3.55 Breaking up tarmac highways with other materials can provide a natural and contrasting relief in an inexpensive way. Using a contrasting material on footways will help delineate routes for pedestrians and discourage motorists from parking on them. Driveways should be smaller scale units of paving with rolled aggregate to help delineate the boundary of the front garden and drive from the back edge of the footway.

3.56 Granite and stone are very hard and non-absorbent so do not absorb stains. When laid properly they are low maintenance, and will withstand very heavy loads. Stone generally improves rather than deteriorates with age. Concrete is also strong, but is prone to staining. If a surface material needs to be excavated, every effort should be made to reinstate the surface with a 'like for like' material that makes newer patches less visible and preserves the

quality of the streetscape.

3.57

11 KEY DESIGN DRIVER

Materials should be in accordance with the 'Standards for Highways' guidance: http://www.standardsforhighways.co.uk/ha/standards/index.htm. Specifically Volumes 1 and Volume 2 of the Manual of Contract Documents for Highway Works (MCHW) and Volume 2 of the Design Manual for Roads and Bridges (DMRB).

3.58

Applicants may also wish to consider whether alternative materials can be used in place of standard highway surface materials and traffic furniture. This should be discussed and agreed with the Council in advance of submitting a planning application. The Standards for Highways website holds all the essential documents on the design, construction and maintenance of highways, including links to the:

- Interim Advice Notes (IANs)
- Routine and Winter Service Code (RWSC)
- Network Maintenance Manual (NMM)
- Technology Management and Maintenance Manual (TMMM)

A commuted sum is sometimes required for adoptions. This is calculated in accordance with guidance issued by the DfT. Enhanced commuted sums might be required for those materials where abnormal maintenance costs are likely to occur.

Skelmanthorpe, Denby Dale

3.59

Procedure Guidelines for the Design and Construction of Highway Structures:

12 KEY DESIGN DRIVER

Highway structures are key components of the highway network and their design and structural adequacy has a substantial impact on the safe operation of the highway. It is therefore a requirement that technical approval procedures must be followed for the design and construction of all new or modified highway structures (in compliance with the Department for Transport's Departmental Standard BD 2).

3.60 The procedures defined in that document shall apply to:-

(a) Highway structures which are proposed for adoption by the Highway Authority under Sections 38 and 278 of the Highways Act 1980 (including storm water attenuation pipes and tanks with spans/internal diameters of 1500mm or greater that are to be situated under or close to the adopted highway boundary and maintained by the water authority.

(b) Highway and private structures requiring the consent of the Highway Authority under Section 167 of the Highways Act 1980. The details of the Council's procedures are set out on the Council's website: http://www.kirklees.gov.uk/beta/delivering-services/highways-asset-management.aspx

Blakeridge Mill, Batley

3.61 Developers and their structural engineers are strongly advised to fully familiarise themselves with the Highway Structures technical approval process so as to mitigate any delay in their programme of works.

3.62 **Utilities:**

Consideration should be given to the location and installation of utility apparatus in the highway both above and below ground, particularly where surface areas are shared. Where an applicant wishes to propose a shared-surface layout without a separate service margin, early discussions should be held with utility providers, with details of proposed locations for utility equipment submitted to the Council for prior consideration. Due to an increase in metal theft, particular consideration should also be given to the position, surveillance and design of utilities equipment.

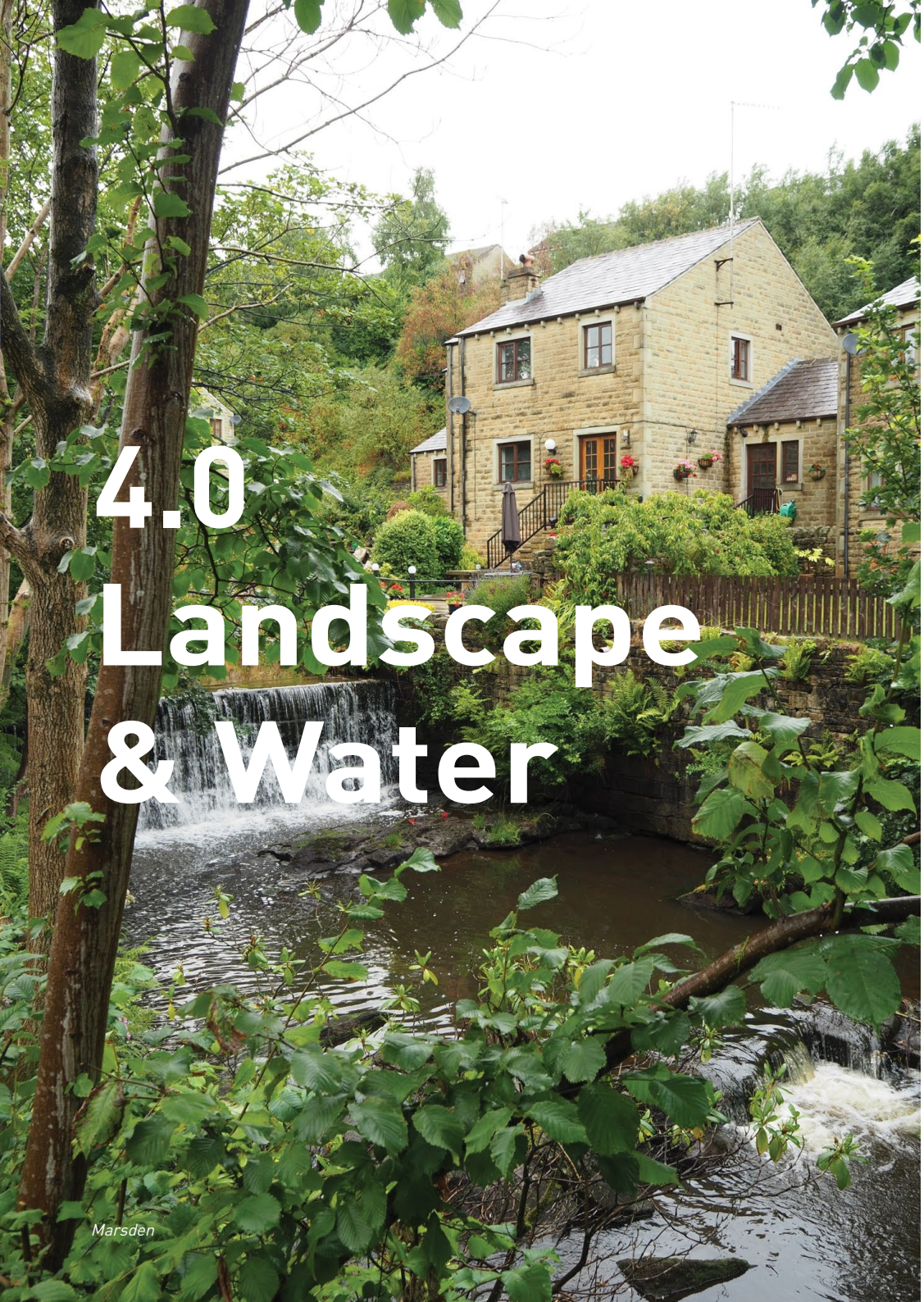
3.63 If requirements cannot be met within clearly defined adoptable areas, utility apparatus should be located outside the adoptable highway, which may necessitate an easement to allow utility providers access for future maintenance.

3.64

13 KEY DESIGN DRIVER

Utility apparatus (above and below ground) should be positioned in accordance with the requirements of NJUG: http://streetworks.org.uk/resources/publications/. All Utility excavations should be backfilled with Type 1 class material to the underside of the road construction.

3.65 Where access covers are located within block paved or flagged footway surfaces recessed covers should be used and the paving pattern continued across the cover. However where vehicles can overrun covers (i.e. shared surfaces) they should be ideally constructed from cast iron and incorporate decorative detailing.



4.0 Landscape & Water

Marsden

Landscape

4.1 Development proposals should adapt to blue and green infrastructure, public open space, and the linkages between these. For example, open space provision is often situated where there are existing trees, which can help to mitigate the impact development has upon a natural landscape. Similarly, highway designs should also adapt to natural features where they are present. Green corridors, public rights of way, and allotments, should also be considered part of green space, given that these also promote outdoor activities, biodiversity and mental health.

4.2 The Council's priority is to create a place where people can benefit both physically and mentally from being in close proximity to greenspace. It is important to increase the green network within Kirklees, and therefore maintain, enhance, and create new links between sites for people, flora and fauna. The design of landscaped areas should be considered at the start of the design process in collaboration with the Council's landscape team.

Public Open Space:

4.3

KEY DESIGN DRIVER

Public open space should always form part of street scene design. Even though it may not always be located within the highway, open space will inevitably be linked to and accessed from the street in some way. Landscape provision within the highway boundary should be an integral part of the detailed design, and be consistent with the wider development and the surrounding landscape context.

4.4 Planning applications should include maps that illustrate existing and proposed features such as protected trees, public rights of way, green Infrastructure/corridors, wildlife habitats, parks, sports and leisure grounds and, where appropriate, lit footpaths. Although lit footpaths are important for safety and encouraging walking, this must be balanced with the impact that they can have on wildlife. Incorporating these features into the design of new development will ensure that it is fully integrated with its local context.

4.5 The quality and variance of hard landscape materials (such as surfacing, kerbing, paving, walls, bollards, fencing, railings etc) when combined with carefully selected soft landscape elements (including trees, shrubs and grass) will help to add character to a development, and transform the street types outlined in this guide into recognisable places and liveable spaces. Maintenance requirements should always be a consideration so to ensure that areas appear well kept with minimal maintenance.

4.6 Landscaping such as shrub and tree planting, raised planters, ditches, bunds and berms can also be utilised to create a semi-natural barrier that prevents vehicles from mounting the footway and endangering pedestrian safety, thereby integrating security seamlessly into the natural street scene.

Adoption:

4.7 In residential areas the Highway Authority will normally only adopt the paved surfaces (i.e. carriageways, footways, footpaths, cycle ways and hard landscaped areas) and the grass verges required for the functioning of the highway (e.g. visibility splays) and also any

trees retained in them (subject to a condition survey). It is therefore common and expected, in the main, for private management companies to manage and maintain landscaped areas in new developments, including any tree-lined boulevard style entrance roads.

4.8 Additional planting may also be adopted where it forms part of the streetscene, and in particular if it is part of a speed reduction scheme (N.B. A commuted sum for on-going maintenance costs may apply).

4.9

15 KEY DESIGN DRIVER

It is essential that land, structures and apparatus to be adopted are identified during the design stage in order to avoid misunderstandings and consequent delay. All land must be conveyed to individual occupiers, local authorities, statutory bodies, private management companies or some other responsible authority.

The future maintenance responsibility relating to trees, shrubs, verges and other planted areas (in perpetuity) should be established prior to planning submission.

4.10 Highway verges, whether between the footway and the carriageway or adjacent to private gardens, should preferably be adopted by a private management company. Highway verges will be encouraged to enable tree planting and landscaping to take place. Planting of trees, shrubs and ground cover within adoptable highway areas must be agreed with the Highway Authority and Kirklees Landscape and Forestry teams (with respect to type and location) prior to the submission of a full planning application. Any trees to be adopted must be thriving and structurally sound, and should have been assessed as such by an arboricultural consultant.

Huddersfield Town Centre

Street Trees:

4.11

16 KEY DESIGN DRIVER

Trees provide many mental and physical wellbeing benefits as well as providing links to green infrastructure and green streets.

Street trees should be always be proposed within the street corridor as they can aid recognition of spatial geometry, of carriageway edges, and reduce the perceived width of the highway. If extensive tree planting does not form part of the design, there must be a valid and robust explanation as to why trees have been omitted or only used in limited numbers.

4.12 Applicants should give careful consideration to pollution levels in and around their site when selecting tree species. Only trees that can tolerate higher pollution levels should be planted in areas with poor air quality. Likewise, trees within sustainable urban drainage systems should be able to flourish in wet conditions. Ideally, only trees of fastigiated form should be situated alongside the carriageway, due to their slender and upright nature.

4.13 Trees should be of slender girth when mature, and have no foliage lower than 2.1 metres over the footway, or 4.6m over the carriageway. This can be achieved through selective planting and formative pruning. A trees natural capacity to deal with ground conditions should be considered and where possible aid drainage. Trees can also be utilised to aid storm water and infiltration. The Council recommends the retention of existing healthy trees unless a full arboricultural survey suggests otherwise. The Council's Forestry Section is able to provide further guidance.

Blakeridge Mill, Batley

4.14 Proposals should incorporate street trees with a root growth pattern that will not cause future damage to paved highway surfaces. Root barriers may also be needed to prevent root ingress into services. Furthermore, trees should have no guardrails or recessed areas that collect litter.

4.15 Developers should maintain the trees and landscaped areas in accordance with an approved Landscape and Ecological Management Scheme until such time that it is transferred to a Management Company (whose primary objectives permit it to maintain, enhance and renew the landscaped areas).

4.16 Existing trees to be retained for adoption must be subject to a condition survey, carried out in accordance with B.S. 5837 (2012) 'Trees in relation to design, demolition and construction - Recommendations' and have any tree work carried out to the satisfaction of the Council's planning tree team or forestry team/ arboricultural advisers.

4.17

17 KEY DESIGN DRIVER

Within visibility splays and forward visibility envelopes, walls and ground cover shrub planting is acceptable up to a maximum potential growth height of 0.6 metres (above the nearside carriageway channel, or 800mm above the footway) as an alternative to grass (which requires more maintenance). This is subject to the relative height difference between the landscape area and the adjacent carriageway.

4.18 New trees and shrubs should be planted in suitably approved tree pits, with root barriers, drainage and top soil (and to dimensions and specifications set by the Council's forestry, landscape and maintenance teams).

Grass Verges:

4.19 For ease of maintenance, grass verges should be at least 1 metre wide, and planted areas at least 2 metres wide. Tapering verges ending narrower than this should be squared off and hard paved. Grassed areas of less than 10 metres square should be avoided, given that these would be difficult to maintain. Areas requiring extensive maintenance, or where vehicle access is restricted (such as roundabouts) should provide a suitable vehicle hardstanding. Ongoing maintenance costs should also be considered when designing such schemes.

Bywell, Dewsbury

4.20 Grassed areas adjacent to vertical structures should provide a flush hard paved mowing strip at least 200mm wide. A "licence to cultivate" under Section 142 of the Highways Act (1980) can be arranged. This entitles an adjoining owner to maintain the highway verge within residential curtilage, but does not remove the "Statutory Undertakers" rights, or the Highway Authority's liability. Grass should not be used where vehicles or pedestrians are likely to go over it. In such areas, the designs should be amended to include porous but harder wearing surfaces such grass pavers, block paving or other permeable surfacing.

Dewsbury Town Centre

Lighting:

4.21 Achieving an efficient lighting design can be more challenging on tree lined highways. This is because it can be difficult to achieve and maintain acceptable lighting levels when grass verges and trees are located between the footway and the highway. In these circumstances it may be necessary to minimise the width of grass verges and ensure that tree canopies are kept below a certain height. Street lighting is often dual purpose and must adequately illuminate both the highway and the footway.

Water

Site Drainage:

4.22 Developments should make adequate provision for draining surface water from the highway. Highway drainage is likely to be considered part of the overall drainage strategy for a site in instances where attenuation is required. The use of Sustainable Drainage Systems (SuDS), and in particular the use of infiltration techniques, is promoted in the National Planning Policy Framework and associated Practice Guides as the preferable solution for disposing of surface water. The adoption of systems that drain the public highway will be considered on a site-by-site basis, along with commuted sums for their ongoing maintenance.

Sustainable Drainage Systems:

4.23 Sustainable Drainage Systems cover a range of approaches aimed at replicating, where practicable, natural drainage processes. The benefits of SuDS are that they:-

- Slow down the rate of run off from a development, storing volumes temporarily and releasing water slowly to reduce the risk of off-site flooding;
- Protect and potentially enhance water quality by removing pollutants;
- Provide opportunities for amenity and biodiversity enhancement;
- Encourage natural groundwater recharge.

4.24 Sustainable drainage techniques such as soakaways can be used in isolation where they are viable. More integrated schemes for draining development sites as a whole, or highways alone, may incorporate a range of techniques such as swales, detention basins, ponds and wetlands. These serve to manage flood risk and/or improve water quality. This is known as a management train, where the aim is to manage surface water run off close to its source, to further reduce flood risk and improve water quality within the site.

Lindley, Huddersfield

4.25 Various techniques are outlined in 'The SUDS Manual C753, (2015) CIRIA': www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx and advice is also provided within the 'West Yorkshire

Combined Authority SuDS Guidance': www.kirklees.gov.uk/beta/flooding-and-drainage/pdf/sustainable-urban-drainage.pdf

4.26 In practice, sustainable drainage options may be limited for site and highway drainage. An assessment of what is feasible, viable, and reasonably practicable, should always be undertaken. Further guidance can be found in the National Planning Practice Guidance and DEFRA's 'Non Statutory Technical Standards for Sustainable Drainage Systems': www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards

4.27

Factors to consider when proposing drainage solutions:

- Soil types/geology
- Topography
- Slope stability
- Structural integrity
- Spatial constraints
- Cost considerations
- Maintenance considerations
- Proximity of existing properties (including cellars)
- Re-emergence issues
- General flood risk issues

4.28 The options available to manage SuDS are currently limited given that Schedule 3 of the Flood and Water Management Act 2010 has not been enacted. Consequently, Kirklees Council is not set up as a SuDS approving body. The statutory sewerage undertaker for the district has also not indicated that it is able or willing to adopt green SuDS systems. Nevertheless, the Council as the Local Planning Authority has an obligation to ensure the maintenance and management of SuDS over a development's lifetime. In order to ensure that there are clear arrangements in place for this, developers are required to enter into a planning obligation under Section 106 of the Town and Country Planning Act, and instruct a private management company to maintain and manage SuDS.

4.29 In practice, the Highway Authority will seek assurances that any prospective adoptable highway drainage system is either wholly independent from development drainage, or connecting to a shared system that will be adopted or is already adopted by the statutory sewerage undertaker.

4.30

KEY DESIGN DRIVER

Where infiltration is not feasible as a technique, a direct connection to a watercourse would be the preferred option. However, if such a connection would be impracticable, or could create an unacceptable risk to the public, a connection to a public sewer might be considered.

4.31 In the planning process the Lead Local Flood Authority is the statutory consultee for major applications concerning surface

water management. This role is performed by Kirklees Council's Flood Management and Drainage Department who are also the responsible Land Drainage Authority. Advice on the viability and practicality of SuDS and land drainage should be sought at pre-application stage.

4.32 Although there is no right to discharge highway drainage to the public sewer network, a Statutory Undertaker cannot be unreasonable in denying access or place unreasonable conditions in granting access (Section 115 Water Industry Act). Draining to a watercourse will require permission from the landowner under riparian rights, with additional consent required from the Lead Local Flood Authority for ordinary watercourses, and the Environment Agency for enmained watercourses.

Blakeridge Mill, Batley

4.33 In instances where natural infiltration is not feasible, the most common types of drainage solution for the highway, either in isolation or as part of the overall drainage strategy for a site, are soakaway systems and/or attenuation tanks/pipes with flow control devices. Alternative systems can be considered on a site by site basis where appropriate. In practice, the use of SuDS features may be limited where a connection to the public sewer network (or future adoption of downstream infrastructure as public sewers) is likely to be objected to.

Attenuation Tanks:

4.34 Attenuation tanks have the capacity to store at least the critical 1 in 30 year storm event. Volumes in excess of this up to and including the critical 1 in 100 year event with an appropriate allowance for climate change must also be stored on site in an area deemed to be safe. This can be above ground but due to the topography in Kirklees is also likely to be in attenuation tanks. Due to the requirements of flood risk management in the planning process this could result in the need for large tanks/culverts.

4.35 For sites where attenuation needs to be stored under the highway, it is strongly advised that this should be limited to approved products with a span of 900mm or less. Where larger attenuation is required, early dialogue with the Council is advised. Spans between 900 and 1499mm can be accommodated under certain circumstances, but tanks/culverts under the highway with spans or internal diameters of 1500mm or greater are designated as Highways Structures, and as such will require an Approval in Principle (AIP) for their design by the Highways Authority (as set out in the Design Manual for Roads and Bridges - BD 2/12). Developers are advised to discuss the need and location of any attenuation tanks/culverts of this size with the Councils' Section 38 and Highway Structures teams at the

earliest opportunity. Attenuation tanks should be managed and maintained by the Council. Drainage systems that are managed by a management company will not be accepted under the adopted highway.

4.36

19 **KEY DESIGN DRIVER**

The Council recommends that applicants examine a site's drainage requirements at an early stage in the design process in order to 'make space for water'.

Large attenuation tanks/culverts that are considered to be 'structures' are ideally placed in, or under, open space/ landscaped areas, and wherever possible, outside of the boundary of any highways that the developer would ultimately wish the Council to adopt.

Early dialogue with the Council is strongly advised in order to ensure that drainage and amenity requirements are combined in the most effective way possible.

Surface Water:

4.37 Highway drains should be located in land to be adopted as highway under a Section 38 agreement. In exceptional circumstances it may be permitted for a highway drain to cross third party land outside the adoptable highway in accordance with Section 100 of the Highways Act (1980), in which case an easement will be required. For shared highway and domestic infrastructure similar easement rights should be established by the Statutory Sewerage Undertaker or in exceptional circumstances a tripartite legal agreement with the landowner and pre-approved management company.

4.38 As part of managing flood risk on new development, a consideration of potential overland flows from exceedance events and blockage scenarios is required in addition to catchment surface water flood routes that may enter and leave the site. The use of the highway as a conduit should be explored as should the use of open space. The aim should be to protect property and therefore avoid curtilage where reasonably practicable. Overall highway design should avoid creating risk to properties. This is particularly pertinent to short intense storms where water may bypass gullies.

4.39 Surface water run-off from areas outside the highway should not be permitted to discharge onto the highway itself or into a highway drain as part of an agreed flood risk management strategy for the site. The need for this can be mitigated by providing bespoke drainage solutions to private areas, such as the utilisation of permeable surfacing materials like grasscrete.

Marsden

5.0 Parking

Huddersfield Town Centre

Parking

National Policy:

5.1 Government's policy on parking is set out in the National Planning Policy Framework. Paragraph 39 of the NPPF states that when setting local parking standards for residential and non-residential development, policies should take into account:

- the accessibility of the development;
- the type, mix and use of development
- the availability of and opportunities for public transport;
- local car ownership levels; and
- the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

Kirklees Local Plan:

5.2 The Kirklees Local Plan states that car parking provision in new developments will be determined by the above criteria (Policy LP22). LP 22 also states that new developments will incorporate (in their curtilage) flexibly designed and sufficient parking provision for private cars, considering a range of solutions. This is to provide the most efficient arrangement of safe, secure, convenient and visually unobtrusive car parking within a site, including a mix of on and off street parking in accordance with current guidance. Policy LP 22 also states that provision will be made to meet the needs of cyclists for cycling parking in new developments, and that provision will be made to accommodate the needs of disabled people.

5.3 The government abolished national maximum parking standards in 2011 as maximum parking standards can lead to poor quality development and congested streets. Local planning authorities must now seek to ensure parking provision is appropriate to the needs of a development and not reduced below a reasonable level.

5.4

KEY DESIGN DRIVER

Kirklees Council has not set local parking standards for residential and non-residential development, however in practice the majority of new 2 to 3 bedroom dwellings within Kirklees have provided 2 off-street car parking spaces; with 4+ bedroom dwellings providing 3 off-street car parking spaces. New 1-2 bedroom apartments have provided 1 space (3+ bed 2 spaces). In most circumstances this has been supplemented by visitor spaces at the rate of 1 per 4 dwellings. One cycle space per unit is recommended. The Council can advise on provision for other uses. Further guidance can be found here: http://www.kirklees.gov.uk/beta/planning-applications/pdf/guide-to-preapplication-highways-advice.pdf

Design Considerations:

5.5 Parking is a key function of many streets, although it is not always a requirement. A well-designed arrangement of on-street parking provides convenient access to frontages and can add to the vitality of a street. Conversely, poorly designed parking can create safety problems, reduce the visual quality of a street, and limit

5.6 The design of streets, spaces and parking is inherently linked, and should be considered alongside other planning matters, such as the design of the built form and landscape. Parking provision, design and control is fundamental to the masterplanning process and a key determinant of scheme design; however it should not dominate the street scene, dictate the overall layout, or be provided at the expense of other street functions.

5.7

KEY DESIGN DRIVER

Parking considerations should be factored into the design process at the earliest opportunity in order to ensure that the location, standards and specifications for on-and off-street parking help to achieve good design. All proposals should provide full details of the design and levels of proposed parking provision, and demonstrate how the design and amount of parking proposed is the most efficient use of land within the development in the context of encouraging sustainable travel.

Manual for Streets (8.3.12 to 8.3.20) outlines the considerations that applicants should take into account when proposing on-street parking.

5.8 The appearance of parking areas (both in the street and in parking courts) should be enhanced by the provision of shrub and tree planting, with consideration given to viewing angles in order to reduce the visual impact of vehicles.

5.9 Detailed designs and specifications should also promote personal safety and reduce car crime by improving natural surveillance. However this should be achieved in a way that does not compromise the ability of householders to exert ownership over private or communal 'defensible space'. Access to the rear of dwellings from public or semi-public spaces, including alleyways, should be avoided.

5.10 Cars are less prone to damage or theft if parked in-curtilage. If cars cannot be parked in-curtilage, then on-street parking should be provided in view of the home. Where parking courts are used, they should be small and have natural surveillance. Over reliance on in-front-of-plot parking can create wide streets dominated by cars, unless there is sufficient space to use strong and extensive planting to compensate for the lack of built enclosure.

5.11 For occupiers of houses, the amenity value of front gardens tends to be lower when compared to their back gardens. Consequently, increased parking pressures have meant that many householders have converted their front gardens to hardstanding for car parking. This can sometimes have a detrimental impact upon the amenity of street users and the quality of a place, and also lead to problems with drainage. Where no front garden is provided, the setback of dwellings from the street is a key consideration in terms of defining the character of the street.

5.12

KEY DESIGN DRIVER

Any parking surface located immediately in front of a property should be permeable and preferably finished with a natural material. The presence and arrangement of on-street parking, and the manner of its provision, directly influences street width requirements.

5.13 In some locations, a development may be based on car-free principles. For example, there are options for creating developments relatively free of cars, but which are still accessible to servicing, refuse collection and emergency vehicles. Such approaches can have a significant positive effect on the design of residential streets and the way in which they are subsequently used.

Marsden

5.14

23 KEY DESIGN DRIVER

Proposals should:

a) Use a mixture of parking strategies to create the best possible public realm and allow front gardens to be used for planting rather than parking;

b) Use realistic calculations for resident and visitor parking demand, taking into account the location, availability and frequency of public transport together with local car ownership trends and the need for servicing/emergency access to be maintained at all times;

c) Use landscaping, contrasting ground materials, metal plates or block markers, to mark out and number spaces instead of relying on painted white lines;

d) Create parking spaces close to people's homes;

e) Provide a generous amount of accessible, secure and convenient cycle parking at various locations, including behind dwellings;

f) Look into measures to reduce car ownership and parking;

g) Locate parking where it can be overlooked be either residents or their neighbours;

h) Coordinate on-street parking with street lighting, grass verges and tree planting (of an appropriate density and size) to ensure that lighting equipment can be accommodated in the vicinity of parking bays and avoid being obstructed by tree canopies.

5.15 There will be a requirement for designers to show on their layout drawings the intended use and dimensions of all off-street and on-street parking spaces (including garages). Where the driveway to the garage forms the second parking space, this should be at least 5.6 metres from the back edge of the footway, kerb line or hard margin (5.0 metres for a retractable garage door). Applicants should also provide electric charging points to encourage the use of electric and low emission vehicles. This applies to both minor and major planning applications (the thresholds for these are outlined in paragraph 5.19).

Further Guidance:

5.16 Manual for Streets also outlines the considerations that applicants should take into account when designing and locating car parking spaces (see 8.3.29 to 8.3.36 and 8.3.48 to 8.3.54) and garages and driveways (8.3.39 to 8.3.41). The design and location of spaces should also prevent the need for footway parking (see 8.3.42 to 8.3.47) and cater for motorcyclists (see 8.4): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

Slaithwaite

5.17

24 KEY DESIGN DRIVER

Where on-street parking is proposed, the developer must demonstrate how access for heavy goods, waste collection, and emergency vehicles will be achieved, and how bin collection has been facilitated.


Lindley, Huddersfield

Travel Plans:

5.18 Travel Plans are long-term management strategies for integrating proposals for sustainable travel into the planning process. They are based on evidence of the anticipated transport impacts of development and set measures to promote and encourage sustainable travel (such as promoting walking and cycling).

5.19 Travel Plans may need to be formulated in parallel with development proposals and readily integrated into the design and occupation of a new site, not devised after occupation. Major planning applications should submit a Travel Plan; these are residential planning applications where the number of residential units to be constructed is 10 or more, or the site area is over 0.5 hectares. Major non-residential applications are those where the floor space to be built is over 1,000 square metres or where the site area is 1 hectare or above. The Council may also request that a Travel Plan is prepared for minor applications (below said thresholds) if development is likely to generate significant amounts of movement.

Marsden

5.20 **Inclusive Parking:**

People who qualify for a Blue Badge include people who are blind or cannot walk a distance of up to 50 metres without severe pain. This should be considered when deciding where to site vehicle parking spaces for people with disabilities. Appropriate provision should also be made for bus/coach parking, and drop-off/pick-up areas, taxi drop-off/collection, community transport and any interlinking transport systems.

5.21

25 KEY DESIGN DRIVER

Detailed guidance on the provision of car parking for disabled motorists and bay design can be found within Section 5 of Inclusive Mobility: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3695/inclusive-mobility.pdf

Traffic signs and road markings for on-street bays reserved for blue badge holders should comply with TSRGD (tsrgd.co.uk). Specific guidance can be found in Traffic Signs Manual Chapters 3 and 5: https://www.gov.uk/government/publications/traffic-signs-manual

6.0 Servicing

Servicing

Vehicle Path:

6.1 The position of buildings and other road features needs to be considered alongside the requirements for pedestrian and vehicle movements. The vehicle path is the width required for vehicle movement within the overall street width, taking account of the vehicles likely to utilise the street, the requirements for non-car users, and any on-street parking or servicing (including bin collection services). Although it is important that vehicle path requirements are accommodated, they should not dominate the street or be delineated by rigid kerb lines. Conversely, the dominance of carriageways can actually be lessened where vehicle paths are designed to adhere to building lines and natural features.

Lindley, Huddersfield

6.2 Computer-aided vehicle path tracking should be undertaken to ensure that refuse vehicles (and other service vehicles) can manoeuvre along the highway, and past any likely locations for on-street parking. The requirements for street cleansing and gully cleaning should also be considered. For example, kerb edges should be of a sufficient curvature to allow unhindered mechanical street cleaning (at present squared-off or angled kerbs can result in areas of the highway being inaccessible for cleaning) and street furniture should allow for street cleaning activities (both manual and mechanised sweeping).

6.3 Street furniture should be carefully placed to provide service vehicles with the manoeuvring width they require for loading/unloading operations and parking. Account also needs to be taken of landscaping and planting (including access for mowers around mature trees), and any pedestrian areas that may be affected by vehicle overhangs or that may present blinds spots to a driver manoeuvring.

6.4

26 KEY DESIGN DRIVER

There is a need to accommodate the safe manoeuvring and turning requirements of larger vehicles, including those used for refuse collection, deliveries and emergencies. At the start of the design process it is essential that an applicant determines the type of vehicles that will require regular access, and those that can be assumed to require access only occasionally. This will help to inform the vehicle path tracking undertaken before planning submission.

Waste Collection:

6.5

27 KEY DESIGN DRIVER

a) Adequate bin storage should be provided for all dwellings, with easy, level access from the storage location to the collection point. Bin storage areas should be well integrated in enclosed or otherwise discreet/well screened areas, and must meet fire safety standards.

b) Careful consideration should be given to the location of bin storage facilities to ensure that the amenity of residents is not impacted (i.e. due to odour or anti-social behaviour/crime). Bin storage areas and bin presentation points should be carefully considered and approved by the Council's waste service team before planning submission.

c) Development proposals which may impact on the waste collection needs of a property are required to provide a Waste Management Plan to the Council's Waste Services Team prior to planning submission.

6.6 Waste collection points need careful consideration and planning so that they're accessible to a Refuse Collection Vehicle (RCV). Bin presentation points need to be hardstanding (preferably porous) and easily cleanable. The design of private land around each property should provide sufficient space to accommodate the secure storage of at least two 240 litre wheeled bins (one grey bin for residual waste and one green bin for recycling). As a general rule, bin storage areas should be no further than 25 metres away from where an RCV can gain access. Special consideration should be given to bin presentation points within cul-de-sacs to avoid large groups of bins being grouped outside one property and/or obstructing the highway, footway or shared surface.

Skelmanthorpe, Denby Dale

6.7 Where multi-storey residential developments are proposed, or where the road is too narrow to accommodate an RCV, a purpose built area for the storage of larger communal bins should be provided. This should meet the Council's waste and recycling collection requirements and encourage recycling among occupants.

The Council encourages well-managed communal bin storage areas where responsibility for their upkeep is provided by a private management/maintenance company funded by local residents.

6.8 Communal bin stores must be as near as possible to an RCV accessible highway, and located to prevent their access being blocked by parked cars or any other obstructions that could be damaged by an RCV. Communal bin stores should also incorporate access control measures to prevent misuse, anti-social behaviour and crime.

6.9 Where practicable, highways should be designed to accommodate a refuse vehicle with the following dimensions:

- Length = 11.85 metres
- Width = 2.5 metres
- Width when Loading = 4.1 metres
- Height = 6 metres
- Turning circle (wall to wall) = 22.07 metres
- Turning circle (between kerbs) = 17.88 metres
- Gross Vehicle Weight = 26 tonnes

N.B. Refuse vehicle tracking shall be undertaken at a design speed of 15mph on Street Types A and B or 10mph on Street Type C.

6.10 All schemes must incorporate reasonable tolerances and safety margins. A good starting point is to allow 0.5m clearance to kerbing or vertical obstructions on each side of the swept path. Designs should therefore, where possible, aim to cater for vehicles larger than the above minimum standards.

6.11 Any need for widening will vary depending on the amount of traffic anticipated on the street, and will also be influenced by the amount of forward visibility provided between passing places on bends. On very lightly trafficked roads, the chances of two large service vehicles needing to pass on a bend must be sufficiently remote to make widening unnecessary. Similarly, where adequate forward visibility is provided between oncoming vehicles, it may be possible for large vehicles to wait until a bend is clear and to use part of the opposite lane when turning. Even with a 15 metre outer curve radius, a pantechnicon (i.e. a 10 metre long rigid vehicle) can turn on a 5.5m carriageway without any widening and without using the whole of the carriageway width. Carriageways should normally be designed to allow a service vehicle and car to pass each other comfortably.

Turning Space:

6.12 Turning space is also required for RCVs to avoid the need for long reversing manoeuvres. A layout that minimises the need to turn or reverse is preferred. The potential implications of vehicle overhang should also be considered within any non-standard layout.

6.13 For a Type C Shared Surface Street which is less than 20 metres long, it may be possible for the refuse vehicle to reverse under supervision from a Type A or B street into the shared area. Where such arrangements are considered acceptable, the turning space at the end of a Type C street may be reduced to that required by a private car only.

6.14 There will also be the occasional need for larger service vehicles to be accommodated, including delivery vehicles and furniture vans.

These have different turning requirements, and whilst a design does not need to allow for regular use, the potential for these vehicles should be considered and accommodated. Turning areas can also be enlarged to allow for the introduction of visitor spaces; designers should ensure that visitor spaces are clear of the turning area.

6.15

KEY DESIGN DRIVER

The Council considers that an area for turning should form part of the street scene. The layout should not simply be a turning area, but an attractive space where vehicles can physically be turned.

Town Centre Refuse Storage:

6.16 Within town centres, refuse storage should be allocated in an external secure storage area (accessible by an RCV) at the back of residential/commercial units, not on the highway.

Litter Bins:

6.17 Key considerations when designing and placing litter bins:

- Their practicality, affordability and how they can be sympathetically designed ;
- Whether the design enables easy emptying, e.g. safe side opening and unlocked access;
- Whether the area around the bin storage can be easily maintained;
- Whether litter bins are sited where there is a need (as established and approved by the Council's Waste Services Team);
- Whether bin size, weight, and bin bag requirements are convenient.

6.18 **Construction Phase:**

During the construction phase, a housing developer should provide a temporary communal bin storage area on the nearest accessible highway. This area should be well maintained, managed by the developer, and accord with the requirements set out above.

6.19 **Public Transport:**

Section 6.5 of Manual for Streets contains further advice on bus-based public transport provision:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

6.20 **Emergency Access:**

Adequate access for emergency vehicles must be provided, and develop-led consultation with the emergency services is recommended for all schemes. Developments should be designed so that there is no requirement for 'emergency vehicle only' links. These are difficult to enforce if there is no physical barrier, and if there is a physical barrier, it can cause delays for emergency vehicles. Section 6.7 of Manual for Streets contains further advice on these matters.

7.0 Appendices

Appendix

Highways Act Section 278 Policy

7.1 If your development requires any alteration to the existing highway network (e.g. for the creation or modification of access to your site) then these works must be undertaken by the Highways Authority. An Agreement under Section 278 (S278) of the Highways Act 1980 will also be required.

A S278 Agreement is an agreement between Kirklees Council (KC) and the developer which describes proposed modifications to the existing highway network to facilitate or service a development. It is not a contract to carry out work and a S278 Agreement only applies to works on existing highways.

Kirklees Council is committed to working closely with developers to achieve:

- The highest quality development possible.
- Efficient and effective delivery of projects for the benefit of all parties.
- The delivery of highway works constructed to adoptable standards.
- Minimal disruption during construction.
- Delivery in accordance with relevant legislation; and
- Consistent use of acceptable materials on the publicly maintained highway.

The Council's S278 procedure is described in the Highway Guidance Document – Section 278 Procedure.

Road Safety Audit Procedure

7.2 Developers will be required to submit an independent Road Safety Audit (RSA) including the RSA brief and designer's comments for all section 38 and 278 works.

They are to be undertaken at the stages outlined in Kirklees' Section 278 procedure document and the Kirklees Section 38 procedure document.

For Section 38 agreements a developer can supply an audit that has been undertaken by an independent auditor to that of the designer / design team or alternatively an audit undertaken by Kirklees' Road Safety Audit team on their behalf.

- For Section 38 audits undertaken by external companies to the Council there is an expectation that the audit team carrying out the audit will be working to The Institute of Highways and Transportation Road Safety Audit guidelines or to Design Manual for Roads and Bridges Part 2 HD19/05 Road Safety Audit.
- For Section 38 audits undertaken by Kirklees' Road Safety Audit team they will be undertaken in-line with Kirklees' Road

Safety Audit Procedures which incorporates elements of the IHT guidance and DMRB HD19/15 mentioned above.

7.3

For section 278 agreements, as a result of the design work being carried out by Kirklees Council Design Teams, an audit will be undertaken by Kirklees' Road Safety Audit team in-line with Kirklees' Road Safety Audit Procedures.

Kirklees Council Design and Audit Teams are committed to working closely with developers to;

- Enhance the importance and relevance of road safety engineering in highway design work and to enhance consideration for the safety of all categories of road users in all new and existing schemes
- Ensure that safety related design criteria (e.g. critical sight distances) are met
- Minimise the risk of crashes on the road network once a scheme is complete.

Motorcycle Highway Design Checklist

Surfacing and skid resistance:

- Are pavement conditions adequate so that motorcyclists will not encounter problems with changes in friction, cracks, potholes, surface water, gravel etc.?
- Are there locations where high skid resistance surfacing (such as on bends or approaches to junctions) would be beneficial?
- Do changes between different types of surfaces occur at locations where they could adversely affect motorcycle stability (such as on bends or approaches to junctions), and are they perpendicular to the carriageway?
- Do the locations of features such as service covers give concern for motorcycle/cyclist stability? Can they be relocated or provided with high friction covers.

Road markings:

- The skid resistance value of road markings is often different to that of the surrounding carriageway surface. Do road marking materials have an adequate level of skid resistance?
- Are directional arrows and other road markings placed in a manner that will not create poor skid resistance for motorcyclists at critical locations (e.g. bends, immediate approaches to junctions)?

- Are all road markings/studs clear and appropriate for their location?
- Have old road markings and road studs been adequately removed?
- Are there any large areas of road markings that could be removed or reduced in size?
- Do longitudinal road markings direct vehicles around refuges and other obstructions (rather than leading vehicles towards the feature)?

Drainage:

- Will the scheme drain adequately, or could areas of excess surface water form, (causing a greater hazard for motorcyclists than for other vehicles)?
- Could excess surface water turn to ice during freezing conditions?
- Could excessive water drain across the highway from adjacent land?

Visibility:

- Are visibility splays adequate and clear of obstructions such as street furniture and landscaping?
- Will sight lines be obstructed by permanent or temporary features e.g. bridge abutments or parked vehicles?
- Are sight lines adequate on and through junction approaches and from the minor arm?

Landscaping:

- Could areas of landscaping conflict with sight lines?
- Could planting affect lighting or shed leaves on to the carriageway?

Runoff zones:

- Can placing of street furniture be avoided or rationalised where the risk of being hit by motorcyclists is particularly high?
- Have areas in the runoff zone been made as 'forgiving' as possible with motorcyclists in mind (e.g. use of energy absorbing cushions for roadside objects)?

Signs:

- Have traffic signs been located away from locations where there is a high strike risk?
- Are sign posts passively safe or protected by safety barriers where appropriate?

Public Utilities Services Apparatus:

- Are boxes, pillars, posts and cabinets located in safe positions away from locations that may have a high potential of errant vehicle strikes? Do they interfere with visibility?

- Are there any utility inspection chambers in live traffic lanes and/or likely motorcycle wheel tracks?

Fences and Road Restraint Systems:

- Is there a need for road restraint systems to protect road users from signs, gantries, parapets, abutments, steep embankments or water hazards?
- Do the road restraint systems provided give adequate protection?
- Are the road restraint systems long enough?
- Are specific restraint facilities required for motorcyclists?

Maintenance issues:

- General traffic (cars, lorries, buses) often push loose chippings, broken glass and other detritus into parts of the carriageway that are used by motorcyclists, either to filter or in order to take the most appropriate line around a bend or through junctions. If these areas are not regularly swept as part of routine maintenance they can form a loss of control hazard for motorcyclists.
- Successive application of road marking material as part of routine maintenance can result in a build-up of layers forming a stability hazard for motorcycles – this should be avoided.
- Are sufficient procedures in place for the reporting and cleaning up of diesel fuel spills?

Streetworks:

- Any road plates used must be made of suitable material with an appropriate skid resistant surface. Their installation must not represent a hazard to motorcyclists and they should be adequately signed.
- Temporary signs should be placed and maintained to ensure they cannot form a collision hazard for motorcyclists.
- Reinstatement of road surfaces, either temporary or permanent, should ensure that they do not adversely affect the stability of motorcycles.
- Prevent the spread of building material, mud, gravel etc. on the carriageway.
- Ensure clear signing is provided in advance of all works and take account of how motorcyclists requirement may differ from other road users, in the warning given.
- Longitudinal grooving (in the direction of traffic flow) can adversely affect the stability of motorcycles. Carriageway planning that results in grooving should be adequately signed in advance.
- Joint sealing should ensure that excess bitumen is not left on the road surface as this can form a skid hazard for motorcyclists.

THE PLANNING APPROVAL AND SECTION 38 ADOPTIONS PROCESS

PLANNING PHASE

Developer intends to construct new road as part of development and/or to make changes to existing highway

Pre-Planning Application engagement between highway authority, planning authority and developer

Planning application made. Highway authority statutory consultee comments. Stage 1 Road Safety Audit may be undertaken

Planning permission granted with highway conditions attached

HIGHWAY DESIGN GUIDE SPD

The Highway Design Guide SPD informs the planning phase by helping applicants to design streets that are suitable for adoption. The SPD will also be used by the council to determine applications for planning permission and to discharge pre-commencement conditions.

The SPD helps ensure that the highway designs submitted for approval, granted permission, and then discharged; are suitable for adoption.

PRE-COMMENCEMENT CONDITION

No occupation shall be commenced until details of the proposed arrangements for future management and maintenance of the proposed internal estate roads have been submitted and approved (i.e. a copy of a completed agreement between the applicant and the Local Highway Authority under Section 38 of the Highways Act 1980 or the constitution and details of a private management and maintenance company confirming funding, management and maintenance regimes.

PRE-COMMENCEMENT CONDITION

No development shall take place until a scheme detailing the proposed internal estate roads has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include full sections, drainage works, street lighting, signing, surface finishes and the treatment of sight lines, together with an independent safety audit covering all aspects of work. Before any building is brought into use the scheme shall be completed in accordance with the scheme shown on approved plans and retained thereafter.

N.B. (Condition imposed on development of more than 5 units)

These conditions ensure that roads are designed in conformity with adoptable standards and approved as such by the Council before development commences.

At this stage the applicant should decide whether they intend to offer any new roads for adoption.
If so, the applicant is advised to obtain Technical Approval prior to applying to discharge the above condition (i.e. follow ROUTE 2).
Alternatively, applicants can choose to follow ROUTE 1 (if roads will not be proposed for adoption or possibly proposed at a later date).

ROUTE 1: ROADS TO BE PROPOSED FOR ADOPTION AFTER 'DOC' APPLICATION

The developer chooses NOT to seek Technical Approval prior to applying to discharge the condition (DOC). Alternatively the developer submits highway scheme details directly to the planning department as part of a discharge of condition application. The case officer consults with Section 38 officers to confirm that roads are designed to adoptable standards. Section 38 officers undertake a 'Design Check'. The design check examines the detailed design and layout. This should confirm that the highway scheme with planning permission is also SUITABLE FOR ADOPTION WITHOUT FURTHER MATERIAL AMENDMENT.

ROUTE 2:
ROADS PROPOSED FOR ADOPTION
PRIOR TO 'DOC' APPLICATION

Prior to applying to discharge the condition (DOC), the developer chooses to seek Technical Approval to demonstrate that the roads they are proposing for adoption are designed to adoptable standards.

DESIGN PHASE

Developer makes Section 38 / Section 278 technical submission in accordance with local authority published requirements

Local authority costs indicated / fee estimate provided

Developer pays fees

Road Safety Audit Stage 2 undertaken on preliminary approved drawings

Technical Approval granted by local authority

After Technical Approval has been granted the Discharge of Condition Application should be submitted for approval.

CONSTRUCTION PHASE

Legal Agreement drafted *

Bond and fees paid. Section 38 Agreement completed

Pre commencement requirements satisfies (Traffic management drawings / contractor approval, publicity of works etc.)

Construction starts. Works inspected by local authority

Works completed. Road Safety Audit Stage 3 undertaken if required

First certificate issued. % of bond reduced.

Works serve a minimum 12 month maintenance period

Works inspected, remedial work completed. Stage 4 Road safety audit undertaken if required

Developer complies with all obligations under Section 38 Agreement. Commuted sums paid. Final certificate / adoption certificate issued by local authority. Remainder of bond released

Highway Maintainable at Public Expense

THE CONDITION CAN BE DISCHARGED

REASON: Route 1 designs will have been confirmed as suitable for adoption by virtue of passing a 'Design Check'.

Developers should then seek Technical Approval through the Section 38 process as soon as reasonably practicable.

THE CONDITION CAN BE DISCHARGED

REASON: Route 2 designs will have received Technical Approval. The council therefore considers these to be suitable for adoption.

Developers should then resume and follow the remaining stages of the Section 38 process.

DEVELOPMENT CAN COMMENCE*

* Providing all other pre-commencement conditions have been discharged.

Kirklees
COUNCIL