London Road North Design Code

Appendix E

Revised Version

Adopted January 2022

Harlow Council

Working together for Harlow

CONTENTS

1 INTRODUCTION

Introduction

1.1 This design code has been prepared by Harlow Council for the London Road North Local Development Order (LDO) area. It has been drafted alongside the masterplan and LDO for the site. The design code was updated in late 2021 to accord with the revised LDO.

1.2 Purpose

The purpose of the design code is:

a) to clarify what forms of development constitute acceptable design quality and therefore benefit from the planning permissions granted in the LDO;

b) to provide a flexible framework to enable and coordinate the delivery of the masterplan for the site; and

c) to flesh out in more precise detail the standards for development which cannot be explained or illustrated in the LDO.

Development certainty

1.3 The design code establishes a fast-track and certain process to obtaining planning permission through the LDO. It defines up front the design parameters and standards applied to LDO permitted development. The code is therefore a fundamental mechanism in the delivery of a radically simplified planning system for the site.

Application of the code

1.4 The design code is applicable within the London Road North LDO boundary as defined in Appendix A of the London Road North LDO.

1.5 The requirements of this design code apply any class of LDO permitted development where planning permission is conditional on development according with the requirements of the design code. Certain classes of LDO permitted development are conditional on development complying with specific chapters, tables or codes in this document.

1 INTRODUCTION

Document structure

1.6 This document is structured in four parts. Part three of this document comprises the design code. Part four provides parking standards.

Introduction

1.7 This introduction defines what a design code is and explains Harlow Council's approach in using design codes to bring forward enterprise zone development at the site.

Masterplan & spatial vision

1.8 Chapters 2 and 3 explain the rationale behind the masterplan and spatial vision for London Road North.

Design code

1.9 Chapters 4 to 10 of this document constitute the design code. The code presents a set of precise design parameters and standards to coordinate the delivery of development within the LDO area. It is these specific urban design standards by which LDO development will be assessed.

Parking standards and design

1.10 Chapter 11 presents parking standards for new development and design requirements for parking bays and cycle parking.

Appendix A – Design code index

1.11 An index of design codes in this document with page references is provided in Appendix A which is intended to assist developers and development control officers in using the document and locating relevant design codes.

The aim of the design code

1.12 The design code has the following aims:

- to achieve high quality design in accordance with the Harlow Design Guide Supplementary Planning Document (and Addendum) and the National Planning Policy Framework (NPPF).
- to provide clarity and certainty to landowners, developers, businesses, the Local Planning Authority, the Local Highways Authority and the local community about what forms of development do not require planning permission within the enterprise zone.
- to speed up the process of delivering development within the enterprise zone.
- to function as a delivery tool by providing a flexible and clear framework to enable the realisation of the masterplan.
- to effectively coordinate the development across a large site in different ownership.
- to ensure that development on the LDO area is effectively planned, developed and integrated into its surroundings over potentially a long-period of time.

1 INTRODUCTION

What is a design code?

1.13 A design code is a set of specific and precise design rules and requirements which guide the physical development of a site or place.

1.14 The aim of a design code is to provide clarity over what constitutes acceptable design quality for a particular site or area. Design codes provide certainty for developers, local planning authorities and the local community.

1.15 Design codes can be effective tools for implementing an overall vision or masterplan for a place. Codes do this by setting out simple instructions and standards which coordinate different aspects of a masterplan, without prescribing the final outcome.

Design code checklist

1.16 To assist developers and to streamline the LDO and design code compliance process, a design code checklist has been prepared. Completion of the design code checklist is a key requirement of the LDO confirmation of compliance application process.

1.17 Like the LDO confirmation of compliance application form, the design code checklist is a stand alone document which is available on the Council's website.

1.18 Not all the design codes will apply to every form of development, so completing the checklist is a useful way for developer to double check exactly which design codes are relevant to their development proposal.

Flexibility – variations to the design code

1.19 Variations to the code are possible and may be justified, providing a development achieves high quality design and development outcomes. Proposed variations to the code which are deemed by the Local Planning Authority to be of a low design and development standard are likely to be refused.

The process for submitting variations to the design code

1.20 There is a standard procedure for any applicant wishing to remove or vary a planning condition which is established in Section 73 of the Town and Country Planning Act 1990 (as amended).

1.21 Developers wishing to depart from the standards and parameters presented in the design code will need to demonstrate in their application that their departure will result in a high standard of development and that any departure would be beneficial to the aims of the enterprise zone.

Harlow's approach to design coding

1.22 Design codes are a versatile tool. Harlow Council's approach has been to use design codes in a flexible and pragmatic way which is consistent with the philosophy and ethos of the enterprise zone status.

1.23 A fundamental aspect of enterprise zone status is a radically simplified approach to planning within the zone. The intentions behind this simplified approach is to promote private sector investment and growth by increasing the speed and certainty of the planning process and reducing potential delays, burdens or barriers to investment.

Design parameters: a loose framework

1.24 This design code uses parameters to establish flexible, clear and robust design standards for LDO permitted development.

What is a parameter?

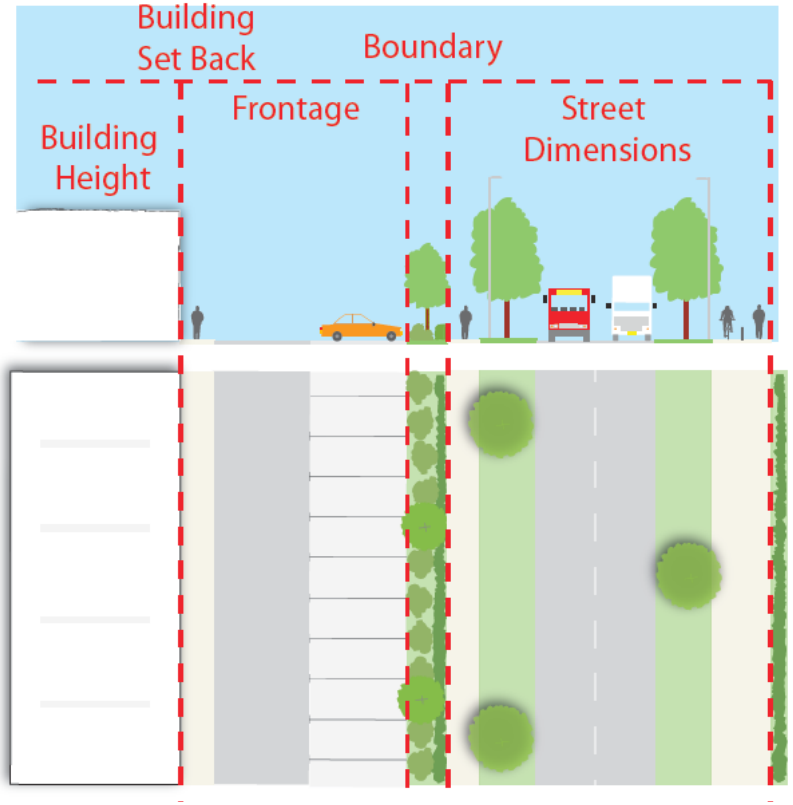
1.25 Parameters are guidelines or criteria which shape but do not determine or prescribe an end result or outcome. The parameters of this design code establish a loose framework for the functioning of the permitted development regime within the LDO area. This is necessary in order to enable the diverse forms of development within the target sectors.

The focus of the design code parameters

1.26 The design code parameters are focused on the critical elements of design which are seen to be fundamental to ensuring high quality, sustainable development. These are viewed to be those features of development which affect the public realm, movement, the sustainability and value of development and its potential impact on its surroundings.

1.27 The focus of the design code is therefore on:

- street design (including carriageway, footway, verge, cycle path dimensions and tree planting);
- building set back;
- building heights;
- frontages, boundaries and fencing; and
- frontage building orientation and massing.



1.28 Internally within a development parcel a significant amount of flexibility and freedom is provided to allow development, business growth and innovation to be delivered across the broad range of sectors targeted by the enterprise zone. In the long-run, this freedom is considered to be a significant attraction for businesses locating to the zone.

1.29 Specific codes are provided in relation to mitigating residential impact as this was an important issue highlighted during the planning and contextual appraisal process.

The benefits of design coding

1.30 A range of published research suggests that design codes provide significant benefits to all stakeholders involved in the development process. [1] The following benefits have been identified:

Delivery - design codes are a powerful and proactive delivery tool. They enable the Council to provide full planning consent for LDO development. This avoids the need for further negotiations, potential uncertainty and delay.

Design Quality - extensive evidence supports the potential of design codes to deliver improved design quality in a range of contexts.

Planning Certainty – a more certain process for gaining development consent is provided with requirements defined up-front.

Less Ambiguity - a set of clear standards to comply with is established thus reducing the scope for ambiguity and different interpretations.

Speed – a more streamlined development control process is created, saving time and money for developers and local authorities and reducing the need for further negotiation and delays.

Certainty for Investment - with the requirements for obtaining planning consent defined upfront, a more encouraging climate for private investment is created.

Transparency and Consistency - design codes provide a more level, transparent and consistent playing field for developers.

Economic Value - enhanced economic value that a positive sense of place and better quality of design can bring.

Coordination - design codes can facilitate a more coordinated development process. This is particularly valuable when sites are large and in multiple ownership and where development is to undertaken by more than one developer.

Who should use the code?

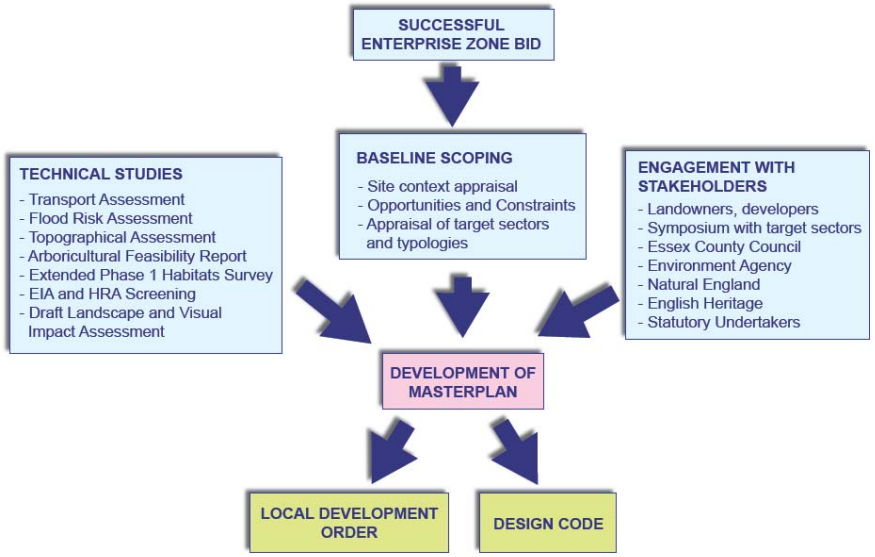
1.31 The code provides a coordinating framework for the long-term development of the site. It should be referred to and used by the following stakeholders and involved in the development process:

- Landowners
- Developers
- Businesses
- Agents working on behalf of landowners, developers or businesses
- Harlow Council Development Management Officers
- Essex County Council Highways Authority Officers

[1] CLG (2006a) *Preparing design codes, a practice manual*. HMSO, London.
CLG (2006b) *Design coding in practice: an evaluation*. HMSO, London.

The planning and design process

1.32 The preparation of the London Road North LDO, masterplan and design code were the outcome of a significant amount of background planning, design and appraisal work and engagement with stakeholders. The content of these documents has been guided by the preparation of a range of supporting technical studies in addition to baseline scoping work and engagement with stakeholders as illustrated below:



The design code and the NPPF

1.33 The LDO and design code must accord with the National Planning Policy Framework (NPPF). The requirements of the NPPF are clear with regard to design quality and new development.

1.34 The London Road North design code has been prepared to ensure the LDO accords with the NPPF in securing high quality design. It sets out clearly what the Council considers to be high quality design and what is therefore benefits from planning permission through the LDO.

2 SPATIAL VISION

2.1 The London Road North Masterplan sets out a bold and clear spatial vision to guide the future development of the LDO area. The purpose of the spatial vision is to translate the aims and intentions of the original enterprise zone bid into a marketable and deliverable masterplan for the London Road North site which is sufficiently flexible to accommodate changing circumstances.

What do we want to achieve?

London Road North will be a distinctive, highly accessible and sustainable business park location.

Enterprise zone development will provide an attractive range of high quality, well landscaped employment premises suitable for a range of small, medium and large businesses within the target Med-Tech, ICT and Advanced Manufacturing sectors.

London Road North benefit from strong connections to the strategic road network. Development will be structured around an efficient and legible street network providing strong connections to the rest of Harlow by public transport, road, foot and bicycle. The design and layout of development will help to ensure the site is carefully integrated with its surrounding urban and landscape context.

Alongside the development at Newhall, London Road North will comprise a sustainable and highly prestigious new addition to east Harlow. Together, the developments will provide the essential economic growth, jobs and housing the town needs in order to grow.

The clustering and growth of target sectors within the zone will galvanise Harlow's existing strengths in the knowledge and high technology growth sectors generating spin-off effects to surrounding employment areas.

Development of the site will put Harlow and West Essex firmly on the map an area driving economic growth in the South East Local Enterprise Partnership (LEP) and making a vital contribution to the economic recovery of the country as a whole.

Illustrative Concept of Spatial Vision for London Road North

Key elements of the spatial vision

2.2 The key elements of the spatial vision for London Road North are described in detail in the London Road masterplan. These elements should be read as a 19 point plan for optimising the development potential of the site and ensuring that it is sustainable. It is therefore vitally important that each feature is delivered.

2.3 This section briefly lists the key elements. Readers should refer to the masterplan for further details and description of the key features of the masterplan and the rationale behind it.

1) A new junction on the A414

2.4 A new junction access on the A414 will create strong connections to the strategic road network.

2) Highways improvement to strategic routes

2.5 Significant highways improvements along the A414 on the north and southbound approaches to this new junction will help mitigate potential congestion on this key strategic route running through Harlow to the M11.

3) A new frontage on the A414

2.6 Development will create a new, high profile frontage on the A414. This will announce the presence of the zone to passing traffic flowing through Harlow.

4) A gateway into the zone

2.7 Landmark buildings fronting corner locations at the A414 / Urban Boulevard junction will provide a gateway entrance into the enterprise zone site from the strategic road network.

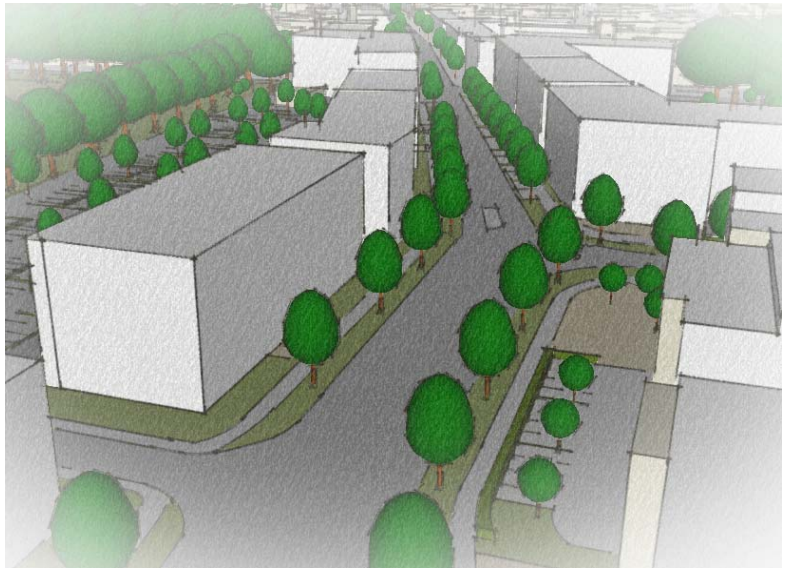
5) A new Urban Boulevard

2.8 A new tree lined Urban Boulevard will provide an attractive, well landscaped route into the business park. This new street will link the A414 to the enterprise zone and flow through into planned neighbourhood centre and housing area at Newhall.

6) Frontage buildings along the Urban Boulevard

2.9 Frontage development along the Urban Boulevard and street trees planted at regular spaces will provide a strong sense of place with frontage buildings defining the street and enclosing the space between.

Frontage and landmark buildings to create a well defined gateway into the enterprise zone site.



Frontage buildings and street trees to create a continuous tree lined Urban Boulevard flowing into the site and into Newhall

7) Moving the proposed Link Road further south

2.10 Moving the alignment of the Link Road to the south is essential to avoid the water pumping station, allotment gardens and protected wildlife verge constraints. It also helps to create a development parcel to the north of sufficient depth to accommodate business buildings and associated parking.

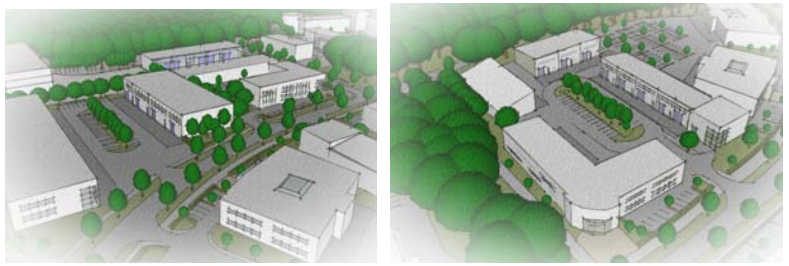
8) A Main Employment Avenue

2.11 A new Main Employment Avenue will provide a strong structuring element running through the central spine of the site. This street will be an attractive and well-landscaped multi-modal corridor providing efficient movement routes for employment traffic, buses, pedestrians and cyclists.

Multi-modal, landscaped Main Employment Avenue running through the site.

9) Spaces for a variety of small, medium and large business within the target sectors

2.12 Development parcels suitable for a diverse range of small, medium and large sized businesses, including incubator units for start-up companies will be created.



Development opportunities created for small and medium sized businesses

10) Making sustainable movement a viable alternative

2.13 Movement routes created by the masterplan and design codes will ensure the delivery of viable long-term bus routes which can plug in effectively into Harlow's existing public transport network. The movement framework will provide attractive and legible walking and cycling routes, in addition to efficient routes for private cars and employment vehicles.

Main Employment Avenue – attractive and legible walking and cycling routes

11) Sustainable Urban Drainage (SUDs)

2.14 Opportunities to incorporate Sustainable Urban Drainage features into the overall street and frontage design will be maximised. This will play a critical role in defining a green, well-landscaped and park-like environment, attractive to investors and businesses.

SUDs corridors incorporated into street and frontage design.

12) Adjoining residential properties

2.15 Adjoining residential dwellings have a close proximity to potential development within the site and will be effectively screened from development by landscaping.

13) Respecting the landscape

2.16 The surrounding landscape assets and existing internal landscape features will be respected and incorporated into the overall layout of the scheme as key structuring elements.

14) Integrating with Newhall

2.17 The opportunity to sensitively merge the enterprise zone development with the adjacent Newhall neighbourhood centre and housing area will be facilitated. There will be an appropriate transition between the main employment uses within the site and the commercial and predominantly residential land uses provided at Newhall.

Mixed use ground floor units and traffic calming measures helps to bridge the gap between the employment area and Newhall, helping to integrate the two areas.

15) Newhall public square

2.18 Development within the enterprise zone boundary will front a new public square at Newhall neighbourhood centre. This will be a lively mixed use commercial area containing a range of shops, cafes, restaurants, services and potentially a shared public space and market stalls.

Newhall public square / neighbourhood Centre at London Road

17) A new landmark

2.20 A new landmark building will be provided terminating views into the Enterprise Zone from Newhall. This will highlight the main entrance to the Enterprise Zone site to people moving through the area and enhance the character and legibility of the area.

Views along the Urban Boulevard from Newhall Neighbourhood Centre towards a new landmark building.

18) An enhanced Public Right of Way

2.21 The existing Public Right of Way (PROW) running through the site will be significantly enhanced and incorporated into the overall movement framework for the site. This route will provide an attractive tree-lined pedestrian and cycle path into the zone from London Road and help to connect the site to existing walking and cycling network.

Public right of way upgraded along the central corridor of the site to form a new landscaped entrance for walking and cycling and an important access road to fringe sites towards the western boundary of the site and electricity substation.

19) Pedestrian and cycle connection to London Road South LDO area

2.22 The opening up of a new link will be facilitated to provide pedestrian and cycle connectivity to the London Road South redevelopment site. This is essential to ensure the sustainable functioning of the London Road South site. It will ensure employees there can access the bus and cycle network to be delivered along the Main Employment Avenue.

3 MASTERPLAN

Introduction

3.1 This chapter briefly describes the main components of the masterplan in order to provide background to the design code. The masterplan for London Road North has three core components.

3.2 These three core components are:

- A movement framework which is based on a coherent urban structure and street hierarchy and the delivery of sustainable transport options.
- The creation of specific character areas which relate to development frontage locations within the street hierarchy. Character areas provide a framework for the location of different employment activities and land uses within the LDO area.
- The creation of development parcels which relate to different land ownership holdings.

Flexibility and fluidity

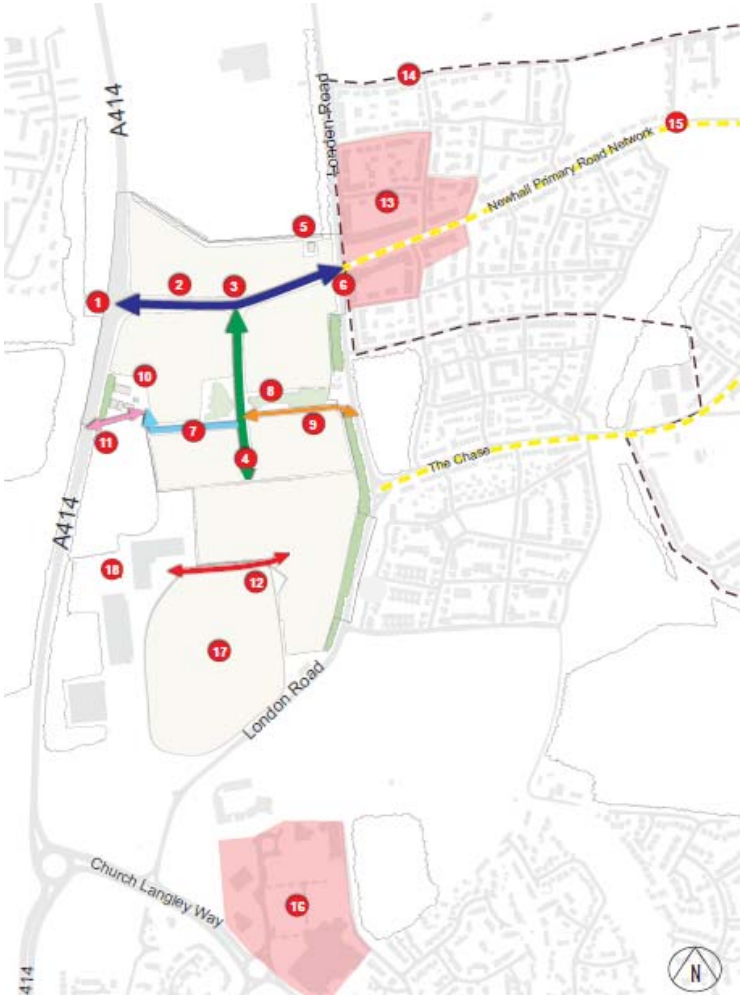
3.3 The masterplan is not a rigid blue print for development within the LDO area. It fixes certain key, fundamental elements which are required of the development; but it does not dictate a particular development outcome. Sufficient scope and flexibility has been designed into the LDO and design code parameters to enable a multitude of different development outcomes to come forward.

Background - London Road North Masterplan Document

3.4 The London Road North Masterplan document explains the rationale behind the masterplan for the site in detail. It highlights how an understanding of the site issues, constraints and opportunities has informed the preparation of the masterplan, LDO and the design code.

Movement framework

3.5 The basis of the masterplan is the movement framework. Key features of the movement framework and masterplan are described below:



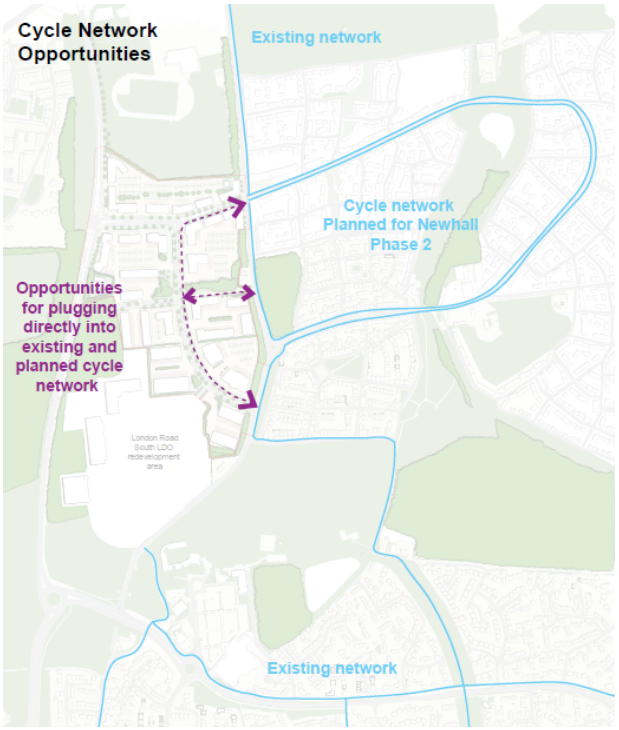
KEY FEATURES:

1. New signalised T-junction on the A414
2. New Urban Boulevard (Link Road) connecting the Enterprise Zone and Newhall to the A414. Link Road alignment brought further south to:
   - create a sufficiently large development parcel to the north for business class buildings and associated parking;
   - avoid the water pumping station and tree belt; and
   - link into the Newhall masterplan and connect to the proposed Newhall Primary Road Network
3. New unsignalised T-junction connecting the Urban Boulevard to the Main Employment Avenue
4. Main Employment Avenue through the site
5. Water pumping station constraint
6. New junction on London Road providing a gateway into Newhall Phase 2 and neighbourhood centre
7. New Access Road built along existing public right of way providing access to planned electricity sub station and employment sites
8. Retained landscaping / tree belt
9. Enhanced Public Right of Way - access limited to pedestrians, cycles and emergency vehicles
10. Proposed electricity sub-station
11. Existing public right of way retained connecting to A414 through Markhall Wood
12. Essential linkage provided connecting the two LDO areas - provision for cycles and pedestrians. Restricted access for private vehicle through traffic.
13. Newhall Phase 2 Masterplan
14. Planned Newhall Phase 2 Neighbourhood Centre
15. Newhall Primary Road Network (Planned Bus and Cycle Route)
16. Church Langley Neighbourhood Centre
17. London Road South Redevelopment Area
18. Buildings M and V and multi-storey car park retained

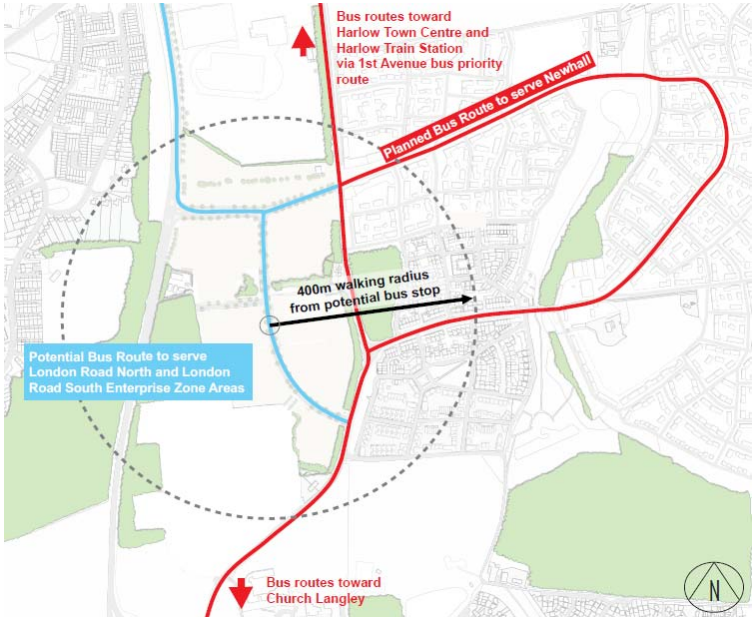
Rationale behind the movement framework

3.6 The movement framework and masterplan have been devised in light of the following priorities and drivers:

- To release well-connected development parcels which reflect the different land ownership areas within the site.
- To ensure strong connections are made to the strategic road network in order to create an attractive business park environment.
- To provide legible, attractive and well-connected movement routes fronted by development which are easy to navigate and move through.



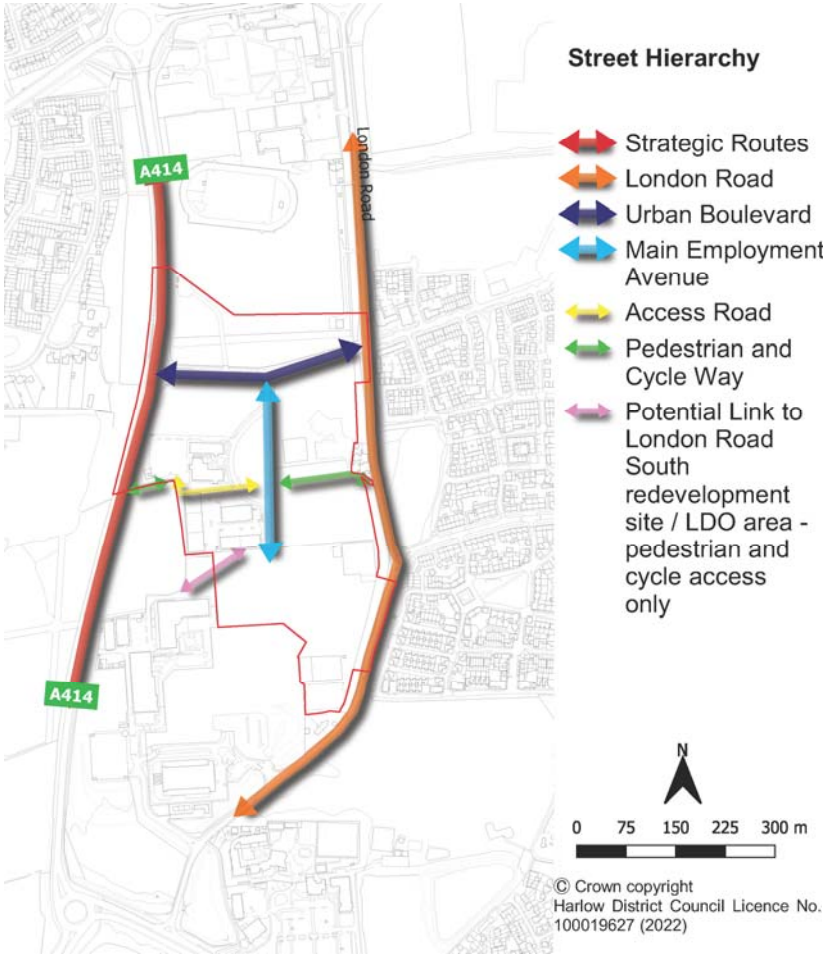
- To optimise the potential for modes of sustainable transport, particularly for bus, cycle and pedestrian movement by:
  - maximising the opportunities for bus service providers to deliver viable long-term bus routes to serve the development.
  - plugging the main movement routes through the site into the existing bus network serving key movement generators such as Harlow Town Centre, Harlow Town Train Station and Harlow Mill Station and the intended bus network extensions planned for Newhall Phase 2.
  - plugging walking and cycle routes into the surrounding network.



Indicative illustration of how the development site could plug into Harlow's existing and future bus network

Street hierarchy

3.7 The movement framework creates a logical urban hierarchy. Individual movement routes and development frontages can be easily defined by their location within this overall urban hierarchy.



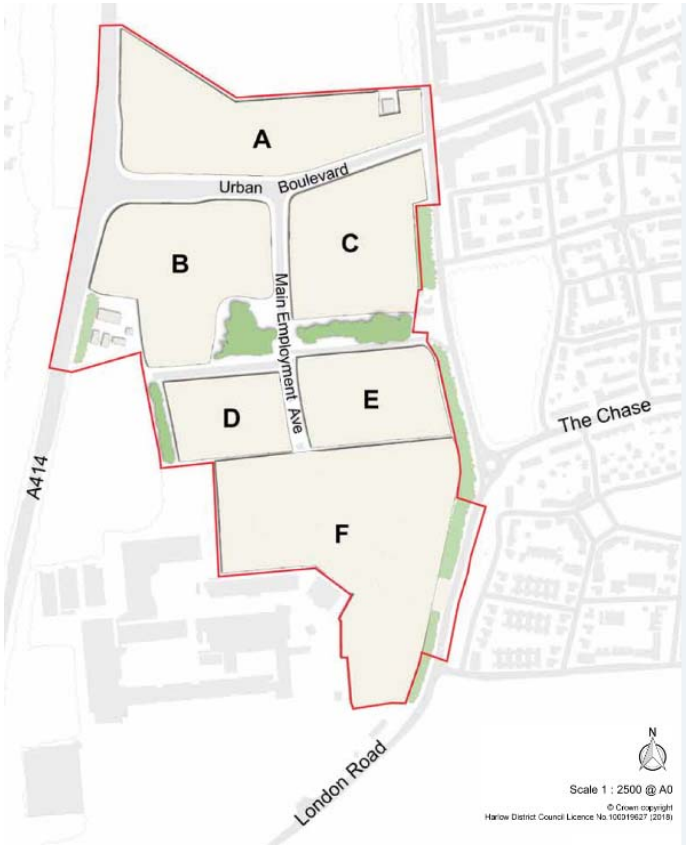
Development parcels

3.8 The masterplan and movement framework broadly accords with different landownership holdings and site constraints identified (for example landscaping areas and public rights of way).

3.9 The development parcels presented are not rigidly defined but are set within a fluid framework which is held together by the design code parameters. The parameters for delivering the movement framework are presented in chapter 8 of this design code.

3.10 Design parameters have been set to ensure that the masterplan is sufficiently responsive to change and so that developers have enough room for manoeuvre when delivering development on the ground.

3.11 This means that the precise development parcels could change in dimension or ownership. However, the critical movement and frontage design components of the masterplan will still be delivered.



Land uses

3.12 An overriding aim of the masterplan is to create a well-integrated and sustainable business park. Business parks are often designed as inward facing, single use enclaves which characteristically turn their backs on their surroundings. A common fault is that they rarely offer any social and commercial amenities within a close walking distance.

3.13 The absence of necessary supporting amenities reduces the sustainability of employment areas and makes them less attractive places to work for highly skilled employees. This inhibits their attractiveness to businesses and investors. Fundamental aims of the masterplan have therefore been:

- to fully integrate the site with its existing surroundings and connect it to the planned development taking place adjacent to it; and
- to encourage an appropriate range of commercial and social uses within walking distance from places of work.

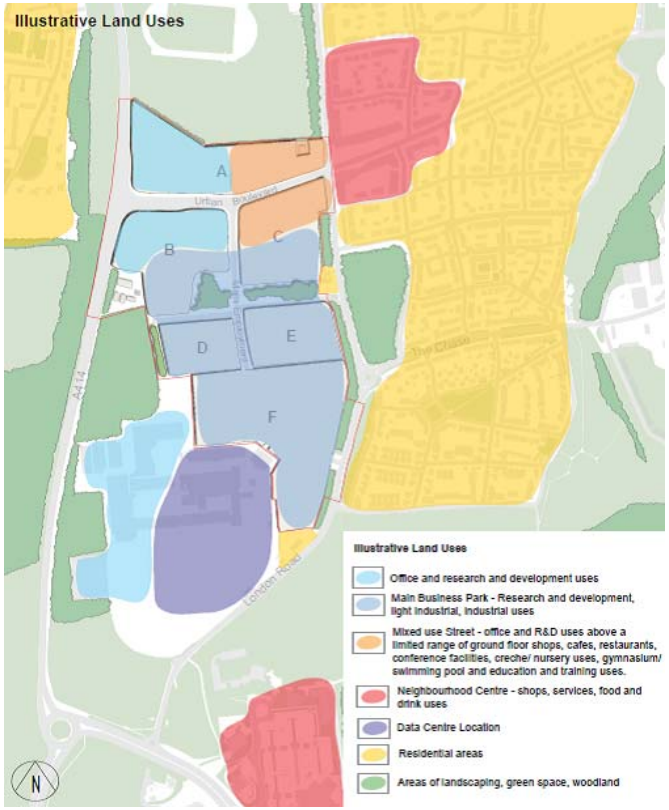
3.14 The LDO provides for a limited range of mixed uses within a specified geographical location (see map right). Commercial and social uses identified in the LDO must be located on the ground floor of buildings fronting either the Urban Boulevard (east) and London Road. Units are limited by location and floorspace in order to avoid uses competing with existing centres.

3.15 The design intention is to draw some of the activity and vibrancy from the planned neighbourhood centre at Newhall into the enterprise zone. This will help to make the enterprise zone an attractive place to work and do business.

3.16 This location is considered to be more suitable than other areas in the zone as it is adjacent to and contiguous with the planned neighbourhood centre. Aligning these uses along the Urban Boulevard (east) - the main east-west movement route through east Harlow - means uses will be in suitably high profile, visible locations and therefore likely to experience high pedestrian footfall.

3.17 The map below also illustrates where office and research development may be most likely to locate. The expectation is that industrial businesses and smaller

advanced manufacturing and engineering companies will be attracted to development parcels off the Main Employment Avenue. However, there are no restrictions in the LDO to this effect and flexibility is provided.



Development Zone

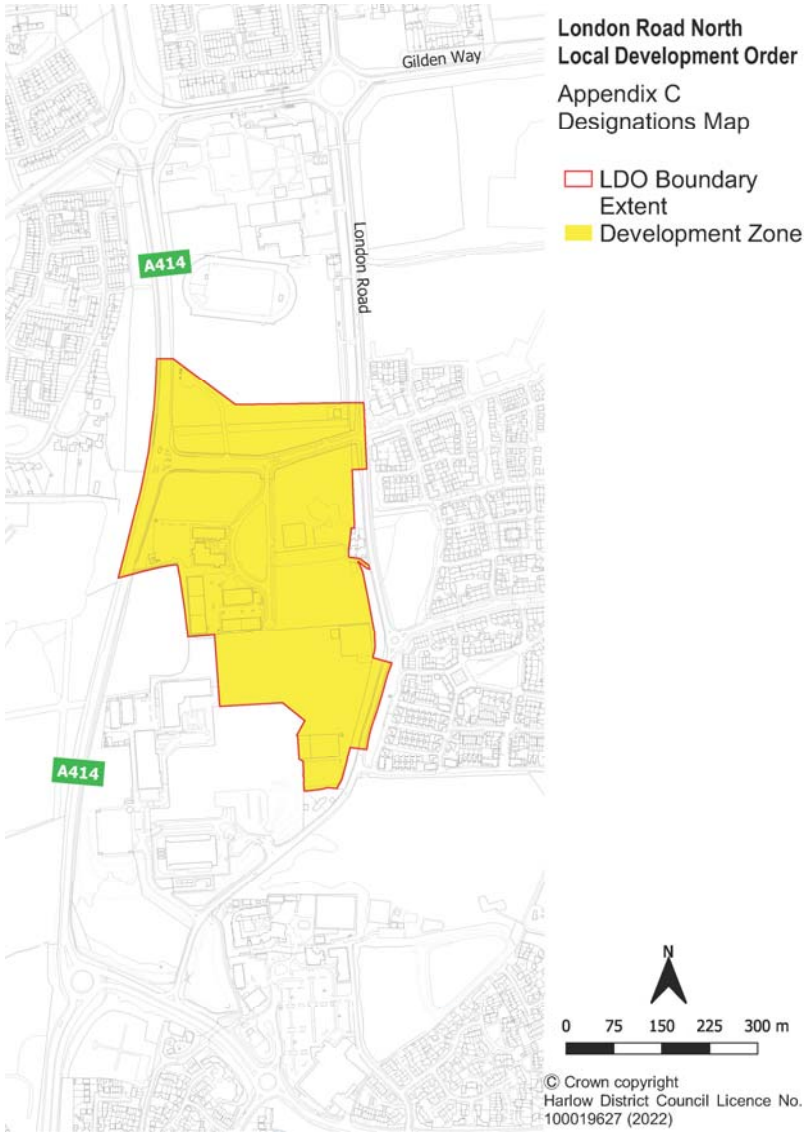
3.18 When adopted, the LDO had three identifiable character areas in the masterplan, entitled ‘Enterprise Zone Gateway’, ‘Newhall Approach’ and ‘Main Employment Avenue and Fringe’.

3.19 There were also three Development Zones – A, B and C – as well as the Newhall Approach Character Area. Zone A was the largest area and intended to be the location for the majority of the employment development; B related to highways and landscaping works; the primary purpose of C was to provide a substation; and, in addition to employment uses, the Newhall Approach Character Area permitted a wider range of uses.

3.20 These three Zones have been consolidated to form a single “Development Zone”, shown in Appendix C (and reproduced in the image to the right) within which development may be located within the LDO.

3.21 This enables the forms of development which could previously be provided in the Zones to be provided more flexibly across the wider site. This also simplifies the LDO and avoids unnecessary repetition.

3.22 The Development Zone does not extend beyond the existing development boundaries, nor would it enable development on parts of the site which are currently protected from development.


Gilden Way
London Road
A414
A414
London Road North
Local Development Order
Appendix C
Designations Map
LDO Boundary Extent
Development Zone
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0 75 150 225 300 m
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4 MAXIMUM BUILDING HEIGHTS

4.1 Table 4A sets out maximum building height standards within the LDO boundary.

Table 4A – Maximum Building Heights

Area	Maximum Permitted Building Eaves Height	Maximum Permitted Building Ridge or Hip Height	Additional Requirements
Main Employment Avenue	13m	16m	* Massing rules apply (see design code RH1, page 34). * Roof plant and utilities structures: • Maximum height of roof plant and utilities structures is 3m. • Maximum height of roof plant and utilities from ground floor level should be within the maximum ridge height standard for the character area (see left). • Plant and utilities should be enclosed under any pitched roof slope facing a highway. • When provided on flat roof buildings, roof plant and utilities structures should either be set back a minimum 2m from building eaves or incorporated into the design of any front or side elevation adjacent to a highway.
Other	17m	20m	

Maximum building heights will be measured from proposed ground levels as shown on submitted plans showing proposed elevations for development which must be submitted to the Council in order to obtain LDO Confirmation of Compliance.

5 STREET AND FRONTAGE DEVELOPMENT PARAMETERS

Introduction

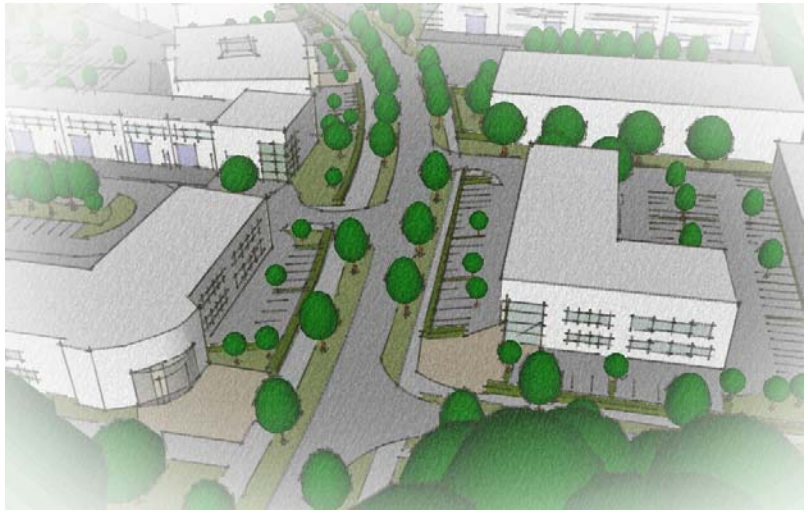
5.1 This chapter of the design code establishes parameters for street design and frontage development within the LDO area. Development undertaken through Schedule A, B and C of the LDO must accord with the requirements set out in this chapter.

Purpose

5.2 The design code standards presented in this chapter are a key mechanism in delivering high standards of urban design within the LDO area. The codes are focused on the main movement routes and development frontages and serve four main purposes:

1) to coordinate the delivery of new movement infrastructure within the LDO area;
2) to ensure the delivery of a high quality, accessible, secure and attractive public realm.
3) to guide the erection of buildings and development frontages along these movement routes; and
4) to guide the alteration or extension of the front elevations of frontage buildings facing these routes.

5.3 Clear standards are provided in this chapter through the use of maximum and minimum design parameters. The aim of this section of the design code is to speed up the development process by providing developers with sufficient clarity, certainty and flexibility.



Main Employment Avenue street and frontage development

A414 and Urban Boulevard street and frontage development

5 STREET AND FRONTAGE DEVELOPMENT PARAMETERS

Background – Relationship to the LDO

Schedule C Development

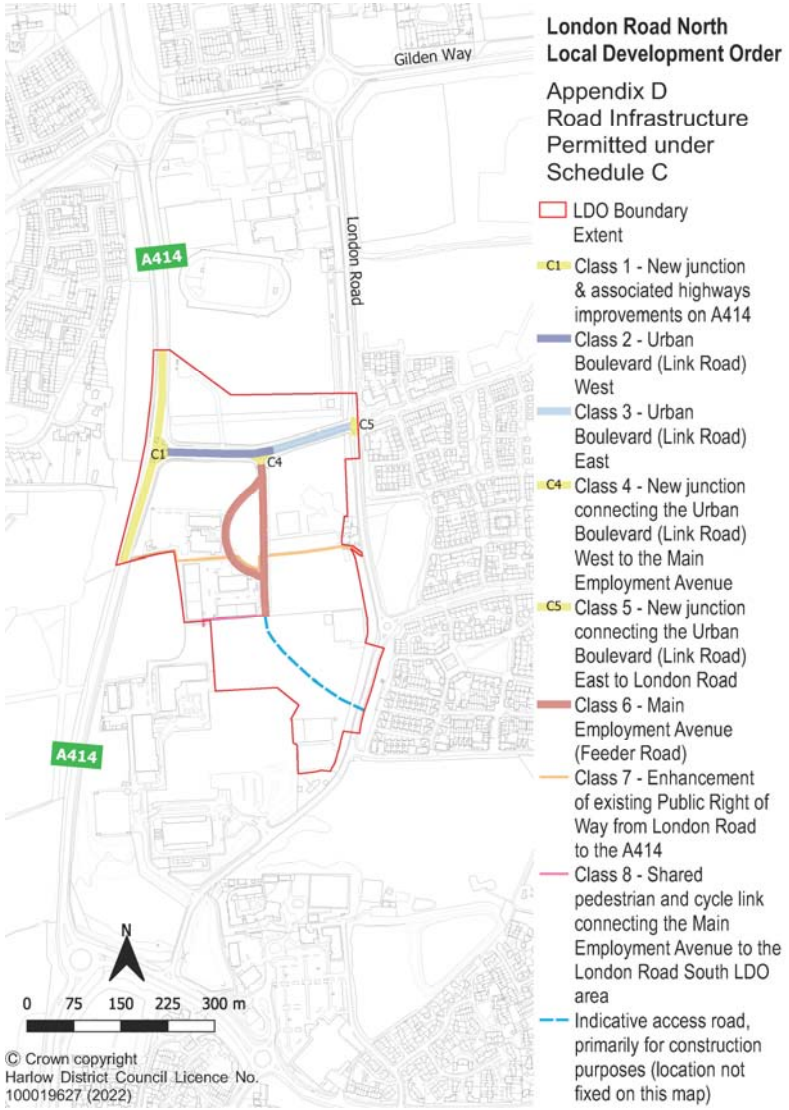
5.4 A range of new highways infrastructure is provided with planning permission in Schedule C of the London Road North LDO. Planning permissions granted by Schedule C of the LDO are, in most instances, conditional on development being in conformity with the parameters presented in specific tables contained in this chapter of the design code.

5.5 Street design parameters presented in this section cover the classes of permitted development shown on the map to the right.

Schedule A and B Development

5.6 Schedule A of the LDO grants planning permission for the erection of buildings and associated landscaping and parking. Schedule B provides planning permission for extensions and alterations of buildings.

5.7 The design parameters provided in this chapter establish standards for frontage development along new movement routes within the LDO area. These design standards apply to new buildings erected under Schedule A of the LDO and extensions and alterations undertaken under Schedule B of the LDO.



5 STREET AND FRONTAGE DEVELOPMENT PARAMETERS

How to use this section of the design code

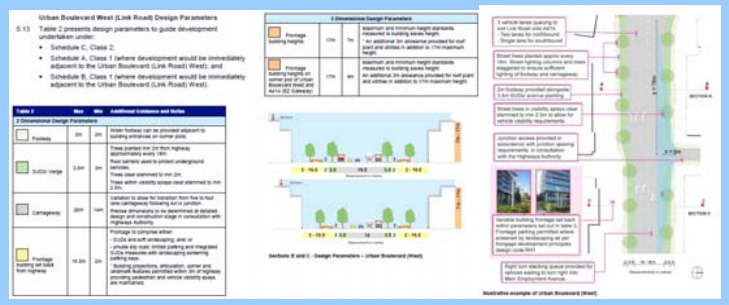
5.8 This chapter of the design code contains a set of tables, sections and supporting illustrations.

5.9 Tables establish mandatory design requirements for new development. Within these tables additional notes are provided to assist developers.

5.10 Tables are supported by sections which illustrate how these design parameters come together in two and three dimensions.

5.11 Further illustrative guidance is provided through the use of two dimensional layout drawings. These illustrations are not mandatory; they are used to show how the design parameters are intended to guide development.

How to use street and frontage development design parameters

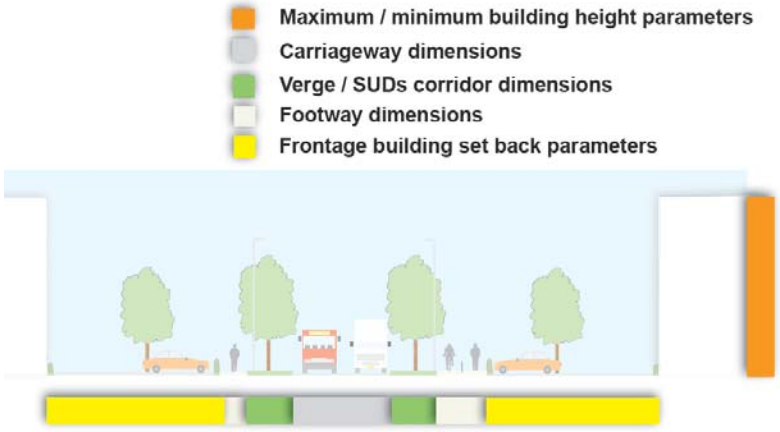


- **Tables** provide mandatory design parameters which development must comply with.
- **Sections** illustrate how these parameters are intended to shape development in 2 and 3 dimensions.
- **Illustrative** two-dimensional layout drawings explain how these design parameters work as a whole and provide additional guidance to stakeholders and developers.

Focus - Street Design Parameters

5.12 Design code parameters are focused on the key urban design elements of the movement network, public realm and frontage development. These are:

- Highways design standards including carriageway, footway and verge dimensions
- Frontage building set back parameters; and
- Frontage building height parameters.

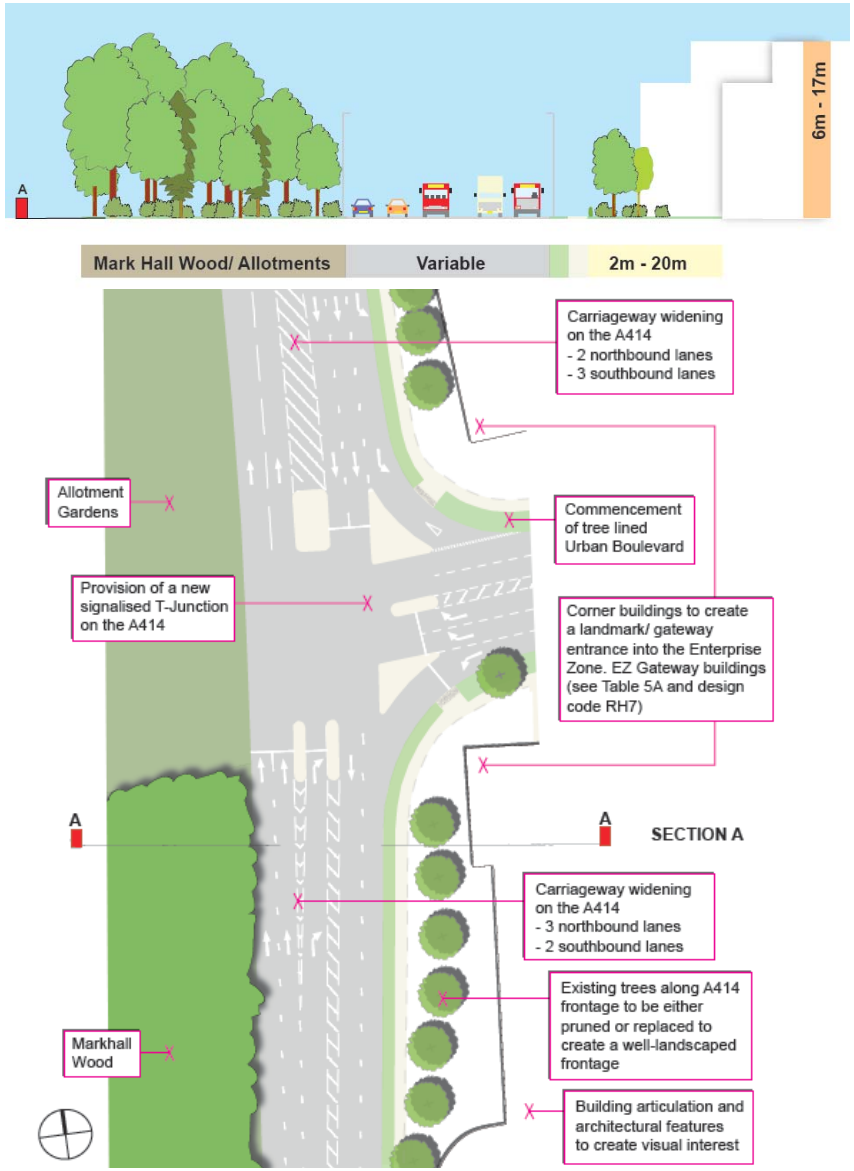


5.13 The following definitions are provided:

- **Maximum frontage building set back** - is the maximum distance frontage buildings can be placed from the highway.
- **Minimum frontage building set back** - is the closest distance (proximity) that frontage buildings can be placed adjacent to the highway.
- **Frontage building** – is any building erected adjacent to a highway.

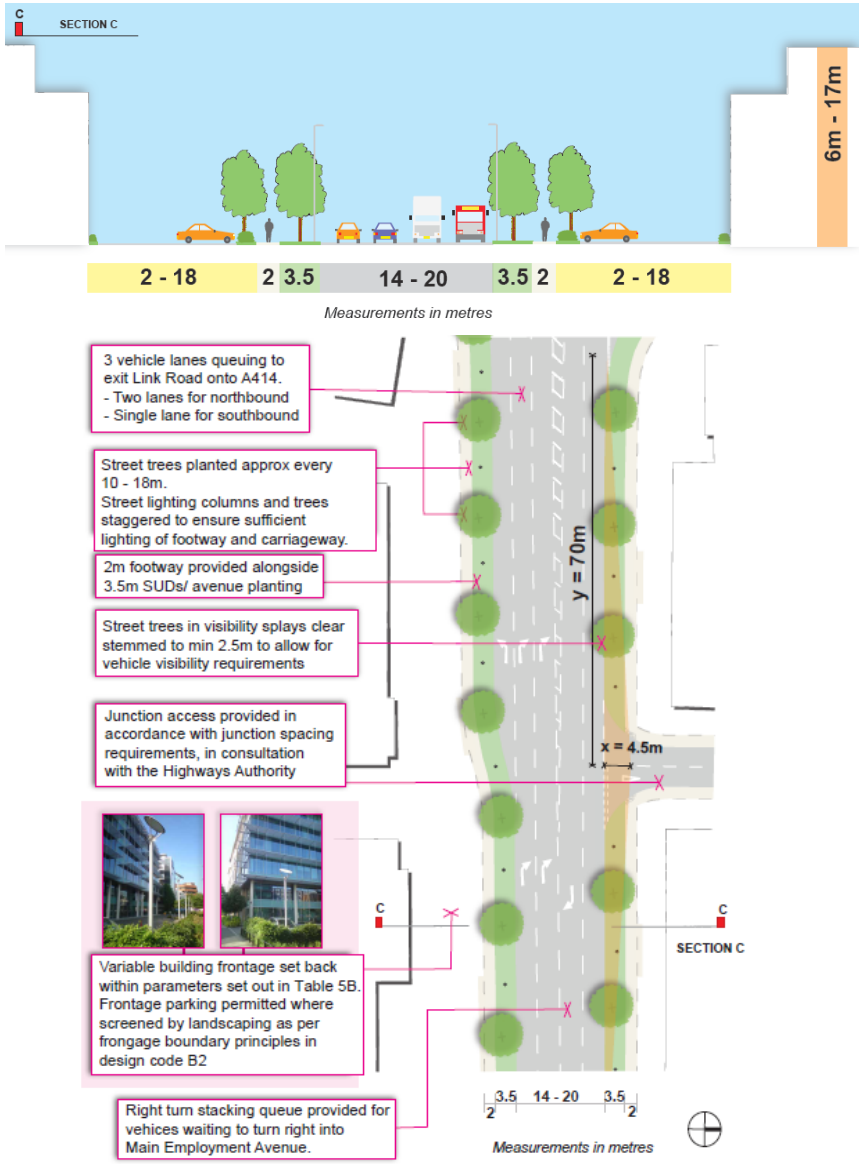
A414 Frontage - Design Parameters

Table 5A	Max	Min	Additional Guidance and Notes
2 Dimensional Design Parameters			
Footway	2m	-	Precise dimensions to be determined at detailed design and construction stage in consultation with the Highways Authority. Where possible the footway should be set back from the carriageway behind a verge to provide a sufficient shelter for pedestrians. Slip roads road along a development frontage may provide a more suitable location for the footway.
Verge	3m	1m	
Carriageway	-	-	
Frontage building set back from highway (where the existing tree line is removed or reduced)	20m	2m	Frontages may comprise either: • SUDs and soft landscaping; and/ or • private slip road with limited parking and integrated SUDs measures with landscaping screening parking bays. Building projections, articulation, entrances, corner and landmark buildings permitted within 2m of highway providing pedestrian and vehicle visibility spays are maintained and an active frontage achieved. * Blank industrial facades adjacent to a relevant highway will need to be set back 5m from highway and sufficiently landscaped (see design code RH11 & RH12).
Frontage building set back from highway (where the existing tree line is retained as a buffer)	n/a	10m	The removal, replacement or thinning of the existing tree belt along the site boundary with the A414 is encouraged in order to provide a high profile gateway entrance to the enterprise zone site (re-landscaping of site boundaries will be required). (see chapter 2 - spatial vision - points 3 & 4).
3 Dimensional Design Parameters			
Frontage building height	17m	6m	Maximum and minimum height standards measured to building eaves height. * An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22). Designated corner plots are defined in design code RH7 on page 42.
Frontage building height on designated corner plots	17m	8m	



The Urban Boulevard (Link Road) West - Design Parameters

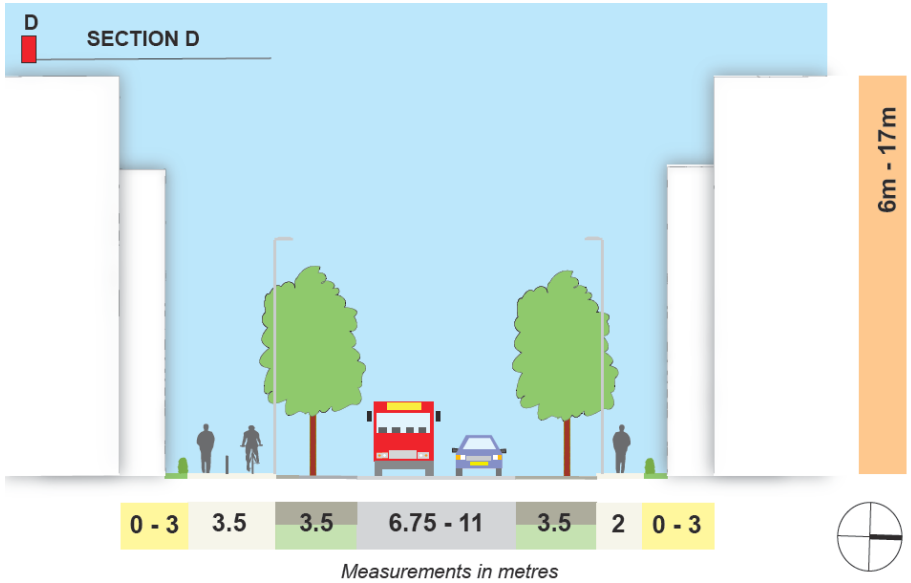
Table 5B	Max	Min	Additional Guidance and Notes
2 Dimensional Design Parameters			
Footway	2m	2m	Wider footway can be provided adjacent to building entrances on corner plots.
Verge/ SUDs corridor	3.5m	3m	Requirements for street tree planting are set out in Table 5I. SuDS designed in accordance with Ciria's National Standards, SuDS Manual C697 and Essex County Council's SuDS Design & Adoption Guide.
Carriageway	20m	14m	Variation to allow for transition from five to four lane carriageway following A414 junction. Precise dimensions to be determined at detailed design and construction stage in consultation with Highways Authority.
Frontage building set back from highway	18m	2m	Frontages may comprise either: • SUDs and soft landscaping; and/ or • private slip road with limited parking and integrated SUDs measures with landscaping screening parking bays. * Building projections, articulation, entrances, corner and landmark buildings permitted within 2m of highway providing pedestrian and vehicle visibility spays are maintained and an active frontage achieved. ** Blank industrial facades adjacent to a relevant highway will need to be set back 5m from highway and sufficiently landscaped (see design code RH11 & RH12).
3 Dimensional Design Parameters			
Frontage building height	17m	6m	* Maximum and minimum height standards measured to building eaves height. * An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22). Designated corner plots are defined in design code RH7 on page 42.
Frontage building height on designated corner plots	17m	8m	



The Urban Boulevard (Link Road) East Design Parameters

Table 5C	Max	Min	Additional Guidance and Notes
2 Dimensional Design Parameters			
Footway / Cycle path	4m	2m	 Cycle Network Requirements: A shared use cycle track/ pedestrian path must be provided along the south side of the Urban Boulevard (east) linking with Main Employment Avenue and the Newhall Primary Road Network cycle routes. This may be a segregated or unsegregated shared use facility. An unsegregated facility is preferred. See table 5J for cycle path design standards. A wider footway may be justified to accommodate outdoor seating and dining areas outside restaurants and cafes.
Tree corridor	3.5m	3m	**Detailed specification of this section of the street will need to be determined at a later date between a developer/ landowner and the highways authority Essex County Council.** **Essex County Council consent will be required for any on street parking bays along this section of the highway.** Requirements for street tree planting are set out in Table 5I.
Carriageway	11m	6.75m	Variation to allow for transition from 11m carriageway to a 6.75m carriageway. Precise dimensions to be determined at detailed design and construction stage in consultation with Highways Authority.
Frontage building set back from highway	3m	0m	A private set back is not mandatory as this will be a mixed use street with active commercial frontages adjacent to the footway. However, a 1m private set back comprising hard or soft landscaping incorporating SUDs measures may be provided. On south facing facades a set back of up to 8 metres is permitted to allow for restaurant and café seating to be erected adjacent to the pavement. Parking slip roads are not permitted along this section as a tight sense of enclosure is desired, with building frontages aligned close to the highway. However, if on-street parking is not delivered, then parking slip roads and 16.5m max set back may be permitted as per EZ Gateway Character Area (see Urban Boulevard Link Road West / Table 5B).

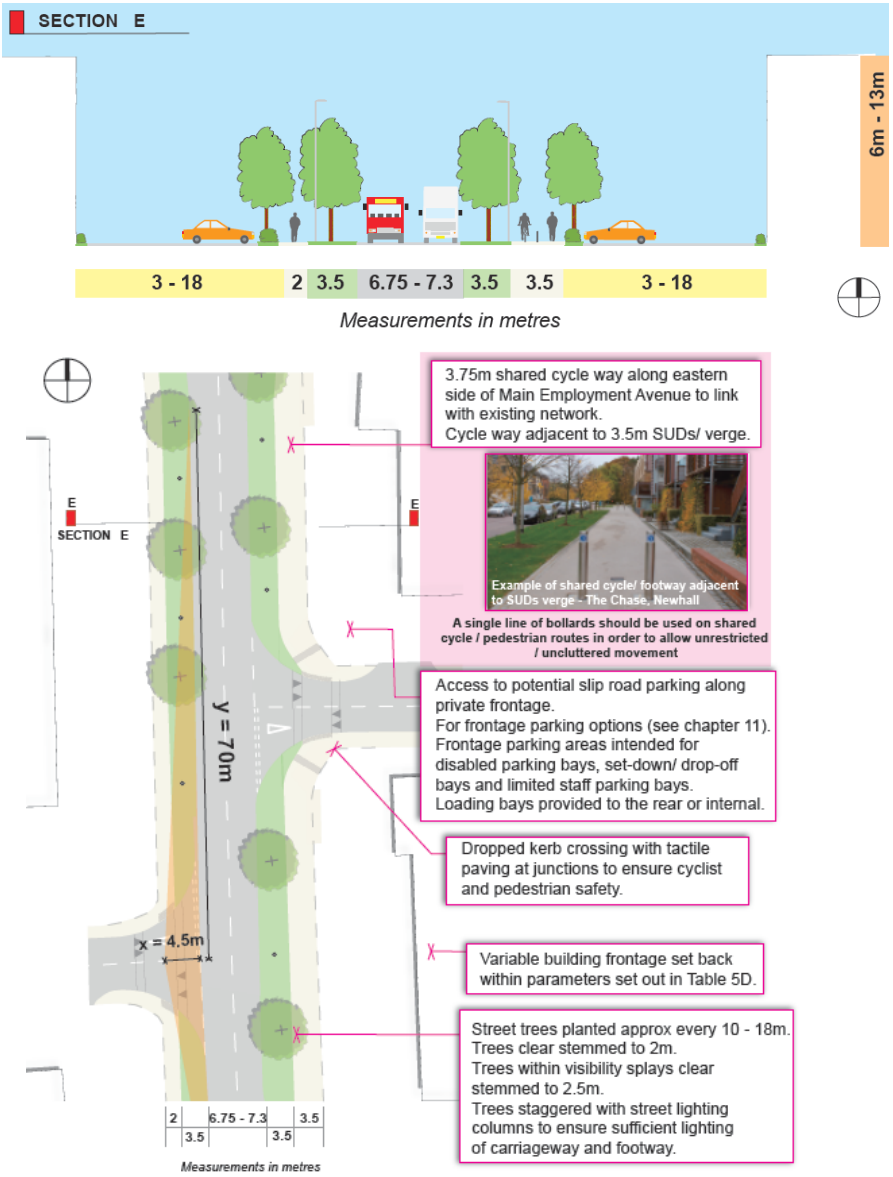
Table 5C	Max	Min	Additional Guidance and Notes
3 Dimensional Design Parameters			
Frontage building height	17m	6m	Maximum and minimum height standards measured to building eaves height. An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22). Designated corner plots are defined in design code RH7 on page 42.
Frontage building height on designated corner plots	17m	8m	



Facing west looking down the Urban Boulevard (Link Road) from London Road

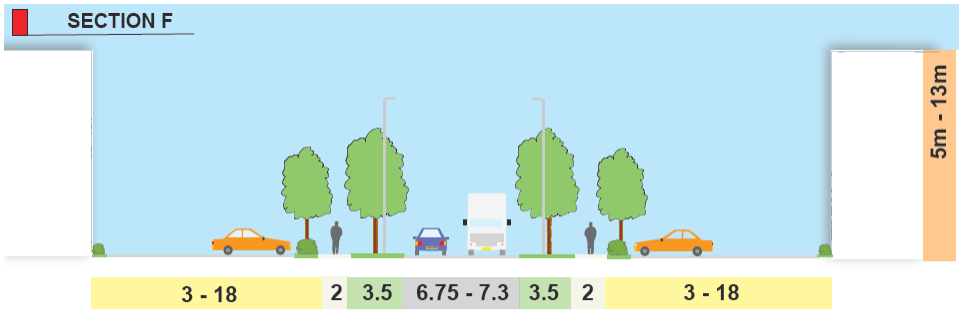
Main Employment Avenue - Design Parameters

Table 5D	Max	Min	Additional Guidance and Notes
2 Dimensional Design Parameters			
Footway / Cycle path	4m	2m	Cycle Network Requirements: A shared use cycle track/ pedestrian path must be provided along the eastern side of the Main Employment Avenue linking with paths provided along the public right of way and Urban Boulevard (east). This may be a segregated or unsegregated shared use facility. An unsegregated facility is preferred. See table 5J for cycle path design standards.
Verge/ SUDs corridor	3.5m	3m	Requirements for street tree planting are set out in Table 5I. SuDS designed in accordance with Ciria's National Standards, SuDS Manual C697 and Essex County Council's SuDS Design & Adoption Guide.
Carriageway	7.3m	6.75m	Precise dimensions to be determined at detailed design and construction stage in consultation with Highways Authority.
Frontage building set back from highway	18m	3m	Frontages may comprise either SUDs and soft landscaping and/ or private slip road with limited parking and integrated SUDs measures with landscaping screening parking bays. * Building projections, articulation, corner and landmark buildings permitted within 3m of highway providing pedestrian and vehicle visibility spays are maintained and an active frontage achieved. ** Blank industrial facades adjacent to a relevant highway must be set back 5m from highway and sufficiently landscaped (see codes RH11 & RH12).
3 Dimensional Design Parameters			
Frontage building height	13m	6m	Maximum and minimum height standards measured to building eaves height. An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22). Designated corner plots are defined in design code RH7 on page 42.
Frontage building height on designated corner plots	17m	6m	

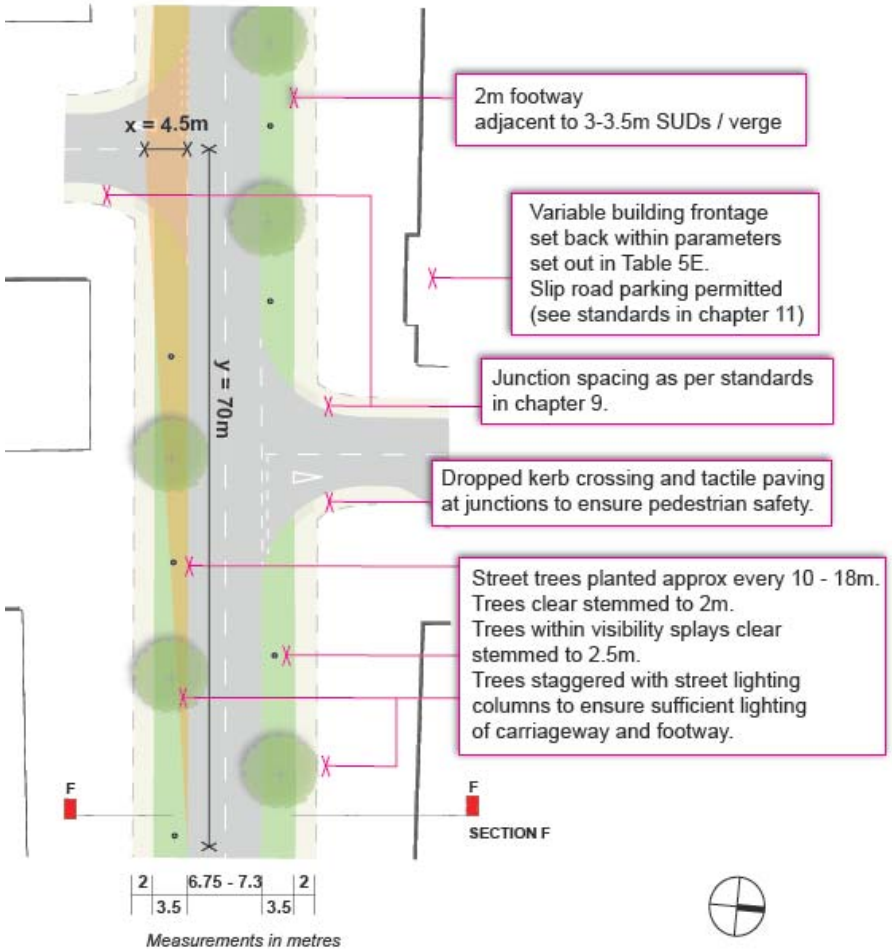


Access Road provided adjacent to the existing public right of way - Design Parameters

Table 5E	Max	Min	Additional Guidance and Notes
2 Dimensional Design Parameters			
Footway	2m	2m	Wider footway can be provided adjacent to building entrances on corner plots.
Verge/ SUDs corridor	3.5m	3m	Requirements for street tree planting are set out in Table 5I. SuDS designed in accordance with Ciria's National Standards, SuDS Manual C697 and Essex County Council's SuDS Design & Adoption Guide.
Carriageway	7.3m	6.75m	Precise dimensions to be determined at detailed design and construction stage in consultation with Highways Authority.
Frontage building set back from highway	18m	3m	Frontages may comprise either SUDs and soft landscaping; and/ or private slip road with limited parking and integrated SUDs measures with landscaping screening parking bays. * Building projections, articulation, corner and landmark buildings permitted within 3m of highway providing pedestrian and vehicle visibility spays are maintained and an active frontage achieved.
3 Dimensional Design Parameters			
Frontage building height	13m	5m	Maximum and minimum height standards measured to building eaves height. * An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22).



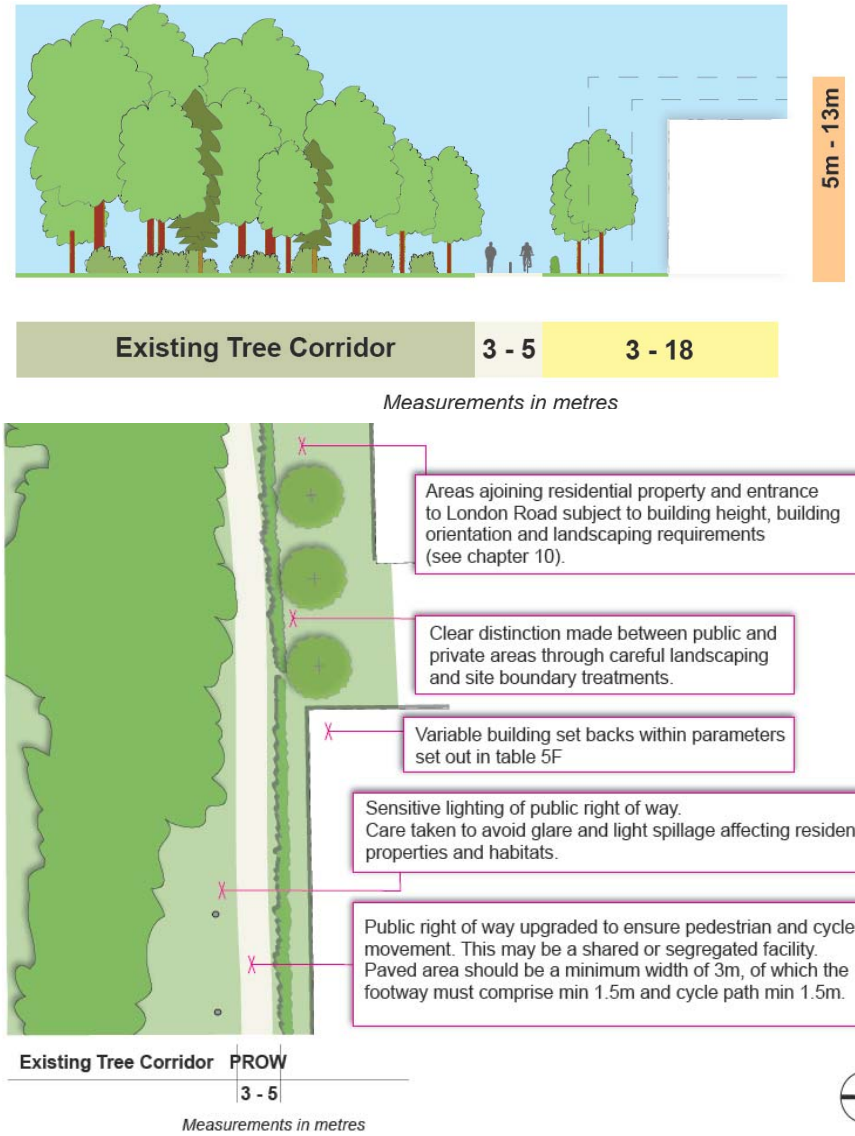
Measurements in metres



Measurements in metres

Public Right of Way between London Road and the Main Employment Avenue

Table 5F	Max	Min	Additional Notes
2 Dimensional Design Parameters			
Footway / Cycle path	5m	3m	Public Right of Way information: Public Right of Way is registered as footpath number 35 on the definitive rights of way map. No historic width is quoted for footpath 35 in the Definitive Statement. Consequently, its width should be taken to be 1.5m, as stipulated in the Rights of Way Act 1990. As a minimum a 3m paved access needs to be provided to cater for pedestrians and cyclists.  Cycle Network Requirements: This may be a segregated footpath/ cycle path or an unsegregated cycle track/ pedestrian path. Because of the issues highlighted in paragraphs 5.17 to 5.21 the provision of a segregated cycle path parallel to the footway may be preferable. See table 5J for cycle path design standards.
Frontage building set back from highway	18m	3m	Frontages may comprise either: • SUDs and soft landscaping; and/ or • private slip road, limited parking and integrated SUDs measures with landscaping screening parking bays. * Building projections, articulation, corner and landmark buildings permitted within 3m of highway providing pedestrian and vehicle visibility spays are maintained and an active frontage achieved.
3 Dimensional Design Parameters			
Frontage building height	13m	5m	Maximum and minimum height standards measured to building eaves height. * An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22). ** Residential impact codes apply (see chapter 10).



Guidance - Upgrading of the Public Right of Way

5.15 It should be noted that public footpaths are defined as highways over which there is a right of way for pedestrians but not cyclists.

5.16 Because of the legal and procedural difficulties which can be encountered in providing cycle access over an existing public rights of way, the provision of a segregated cycle path parallel to the footway demarcated by a dividing strip or bollards may be a more appropriate and time effective solution than the provision of a shared use facility.

5.17 Flexibility is provided to also enable the provision of a shared use facility, should any landowner or developer wish to undertake the necessary legal and public consultation procedure.

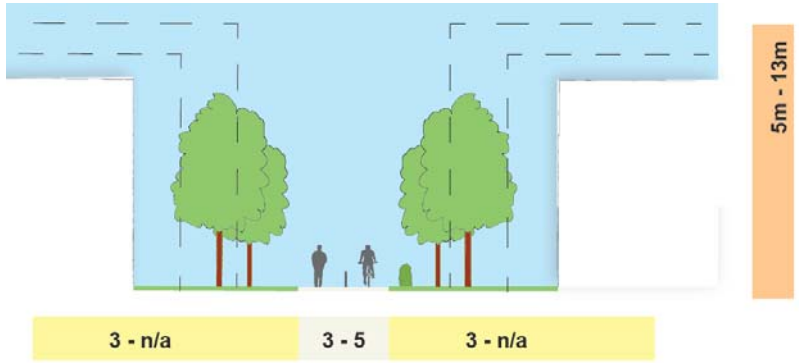
5.18 Where the public right of way is upgraded to a shared use (or multi-use) path to include right of way for cyclists, the Cycle Tracks Act 1984 must be used by the local highway authority. This would involve converting the footpath to a cycle path which may result in the removal of a footpath from the definitive rights of way map.

5.19 Any alteration to an existing public right of way would also need to follow a legal procedure defined by the Rights of Way Act 1990. The Ramblers Association and groups representing disabled people would need to be consulted on any proposed changes.

Shared pedestrian and cycle link connecting Main Employment Avenue to London Road South LDO area

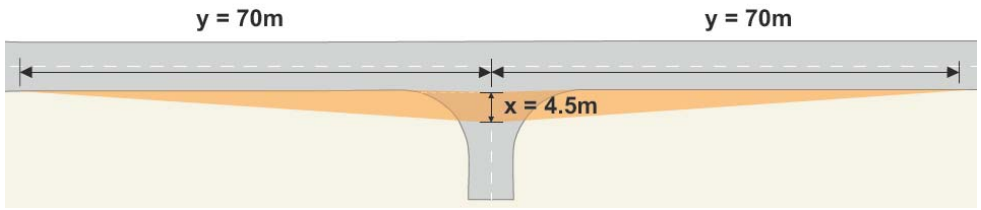
Table 5G	Max	Min	Additional Notes
2 Dimensional Design Parameters			
Footway / Cycle path	5m	3m	Cycle Network Requirements: A shared use cycle track/ pedestrian path must be provided connecting to the Main Employment Avenue to the London Road South LDO area. This may be a segregated or unsegregated shared use facility. An unsegregated facility is preferred. See table 5J for cycle path design standards.

Table 5G	Max	Min	Additional Notes
Frontage building set back from highway	n/a	3m	Frontages may comprise either: • SUDs and soft landscaping; and/ or • private slip road with limited parking and integrated SUDs measures with landscaping screening parking bays. * Building projections, articulation, corner and landmark buildings permitted within 3m of highway providing pedestrian and vehicle visibility spays are maintained and an active frontage achieved.
3 Dimensional Design Parameters			
Frontage building height	13m	5m	Maximum and minimum height standards measured to building eaves height. * An additional allowance of 3m is provided in addition to maximum eaves heights for building ridges, roof plant and utilities (see Table 4A - Max Building Heights on page 22). ** Residential impact codes apply.



Measurements in metres

Table 5H – Vehicle Visibility Splays		
Visibility Requirements		
Minimum junction visibility splays. * Link Road visibility splays to DMRB standard.	x	4.5m
	y	70m
	X distance - is measured backwards from the 'give way' line of the minor arm of a junction or site access along its centre line. Y distance - is measured along the nearside carriageway boundary with the footway (kerb) from the centreline of the new junction or access. See diagram below.	
Application of Table 5H standards	Urban Boulevard West, Urban Boulevard East, Main Employment Avenue and Access Road.	



Management of Visibility Splays

5.20 Planning condition H3 (vehicular visibility splays) is attached to development undertaken through Schedule A (building development) and Schedule C (Road Infrastructure). It requires that these visibility splays set out in this chapter of the design code must be provided before development is occupied and must thereafter be retained free of obstruction at all times.

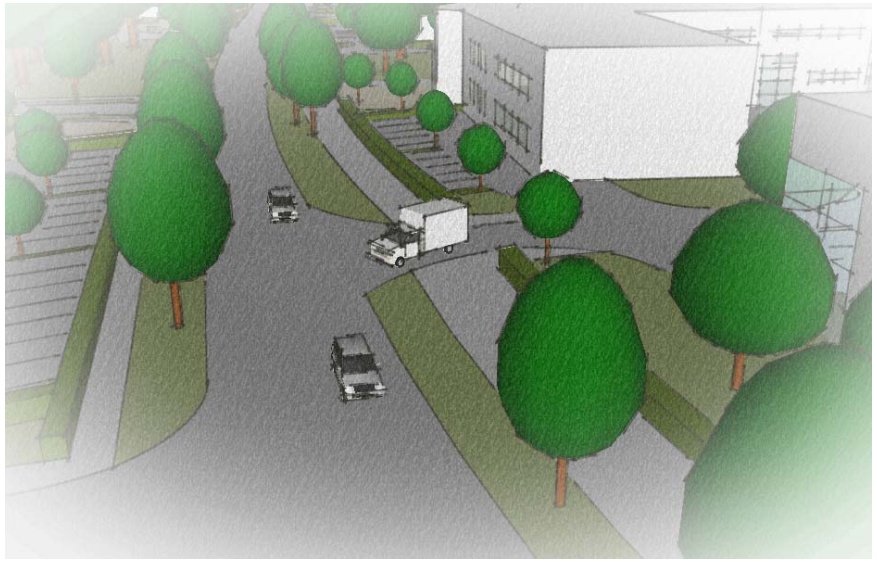
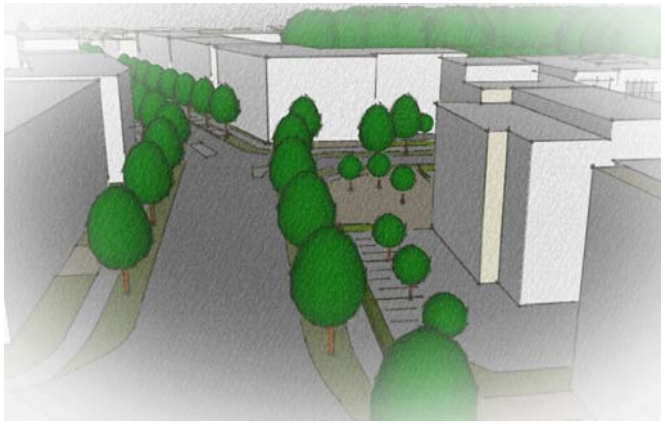


Illustration of site access on Main Employment Avenue – visibility splays maintained to ensure vehicles exiting site access points have a clear line of vision of oncoming traffic.

Street Trees

5.21 Street trees are encouraged in the masterplan and design code as they will help to generate an attractive and well landscaped business park environment which is likely to be appealing to businesses in the target sectors. The design codes in this chapter require trees to be planted within approximate distances along the main movement routes created. The design rules aim to balance the requirement for visibility along a highway with the desire for street trees along the highway.



5.22 It is important to note that any street tree planted within the highway within the LDO area will require approval from the Highways Authority. This is set out clearly in LDO planning condition H5 (Trees in the Highway).

Table 5l – Street tree spacing requirements within verge / SUDs corridors

- Street trees must to be planted along the verge / SUDs corridor on the following routes:
  - Urban Boulevard (West)
  - Urban Boulevard (East)
  - Main Employment Avenue
  - Access Road
- Street trees should be planted approximately every 10m to 18m.
- Trees should be staggered with street lighting and planted a minimum of 2m from the carriageway.

Additional Guidance:

- Root barriers used to protect underground services.
- Trees clear stemmed to min 2m to allow for sight lines.
- Approval of Highways Authority required under condition H5 for any trees within visibility splays.
- Any tree located in a visibility splay should as a minimum be clear stemmed to 2.5m (see photograph of street trees to the left).

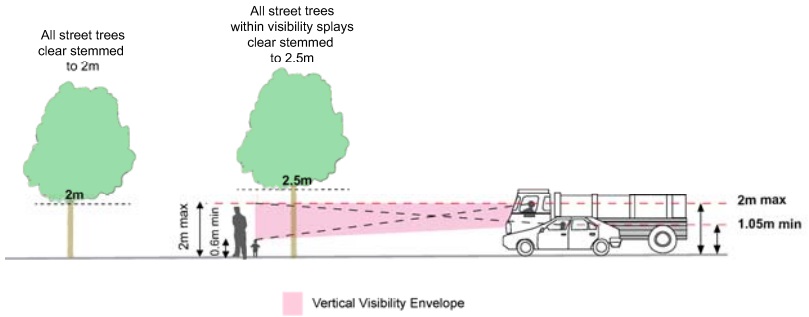


Illustration adapted from Manual for Streets

Cycle Path Requirements

Table 5J – Cycle Path Widths		
Type of cycle track	**Minimum Width**	**Preferred Width**
Cycle track separated from pedestrian path	2m	3m
Shared use unsegregated cycle track / pedestrian path	2.5m	3m
Shared use segregated cycle track/ pedestrian path	3.5m Divided into: Cycle track (2m) Pedestrian path (1.5m)	5m Divided into: Cycle track (3m) Pedestrian path (2m)
Note: The above widths are for paths without physical boundaries. Add 0.5m for each side that is bounded by a kerb, wall, vegetation or similar obstacle.		
Source: Essex County Council (2006) Designing for Cyclists: A Guide to Good Practice (page 46)		

Existing cycle network links in Harlow

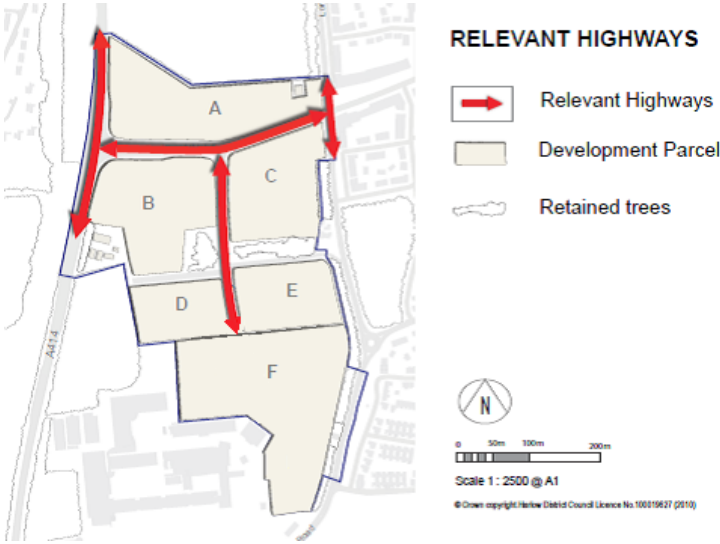
6 FRONTAGE DEVELOPMENT PRINCIPLES ALONG KEY ROUTES

Introduction

6.1 This section of the design code establishes mandatory development principles which apply to frontage development along the four main movement routes in the LDO area. These main movement routes are given the term ‘relevant highways’ by this design code and are marked in red on the map to the below. They comprise:

- The A414 frontage;
- The Urban Boulevard frontage;
- The Main Employment Avenue frontage; and
- London Road frontage (adjacent with Newhall neighbourhood centre).

6.2 The aim of this section of the design code is to ensure that all development facing these key routes is of a high quality of design.



Design code approach

6.3 The approach of the design code is to provide a set of simple and clear design rules to guide the development along these important frontages.

6.4 A lower degree of design control is applied on fringe and internal development plots positioned away from these identified relevant highway frontages.

Codes by use / typology

6.5 Due to the broad focus of the Enterprise Zone target sectors there is a fairly wide range of potential development and building typologies likely to come forward on the site. These building typologies are likely to have very different design, access and layout requirements. Consequently, one set of design rules cannot be applied generically to all enterprise zone development.

6.6 As a result, the design codes in this section are focused on different office (E(g)(i), research and development (E(g)(ii) and industrial (E(g)(iii) and B2) development.

Typical small industrial units

Typical large industrial unit

Typical office and R&D development

Chapter Structure

Office and research and development buildings

6.7 The first section of this chapter provide design codes which apply to office and research and development frontage buildings located adjacent to a relevant highway (E(g)(i) and E(g)(ii) land uses).

Industrial buildings

6.8 The second section of this chapter provides design codes which apply to industrial buildings (E(g)(iii) and B2 uses) located adjacent to a relevant highway.

Application

6.9 Where the existing tree belts along the site boundary with the A414 and London Road are retained as a buffer and a new frontage is not created onto the highway, buildings erected next to this existing tree belt will not be considered to be adjacent to a relevant highway.

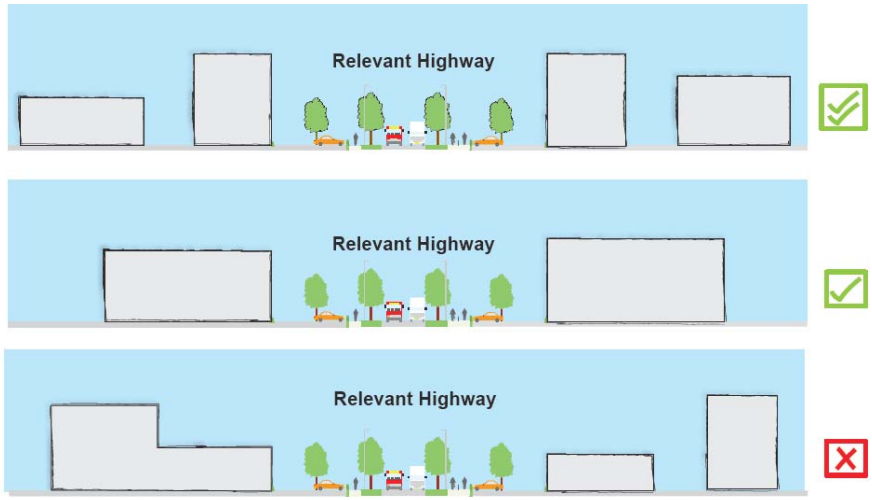
Massing

6.10 Design Code RH1 on massing applies to all development plots adjacent to a relevant highway.

6.11 The massing principle ensures that the tallest buildings within a plot are located fronting important movement routes (relevant highways). This ensures that buildings provide continuity and enclosure and a strong and well-defined urban character along these routes. It also increases the likelihood of natural surveillance, with buildings more likely front and share a formal relationship with the street.

RH1 - Massing of buildings within development plots adjacent to a relevant highway

The tallest building(s) within a development plot adjacent to a relevant highway must be the building(s) which are positioned adjacent to the relevant highway.



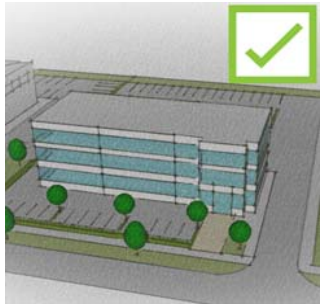
Design codes for office and research and development buildings adjacent to a relevant highway

The following design codes (RH2 to RH7) only apply to office and research and development buildings in E(g)(i) and E(g)(ii) use, where these buildings lie adjacent to a relevant highway.

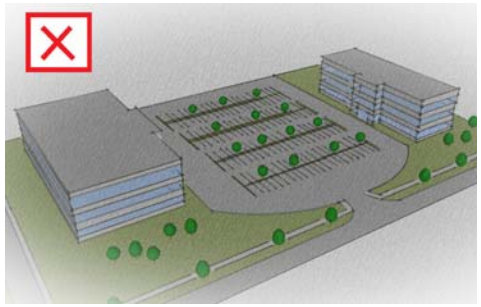
RH2 - Orientation of office and research and development buildings adjacent to a relevant highway

a) Office and research and development buildings erected adjacent to a relevant highway must be orientated so that they face towards a relevant highway in order to create an active frontage.

b) Facing a relevant highway will demonstrated where the principal elevation of a building (normally containing the main public entrance to a building) is positioned and orientated so that is faces directly towards a relevant highway.



Buildings orientated towards the street help to enclose the space and provide natural surveillance.



Buildings orientated to face away from the street fail to enclose or define the street and struggle to provide natural surveillance.

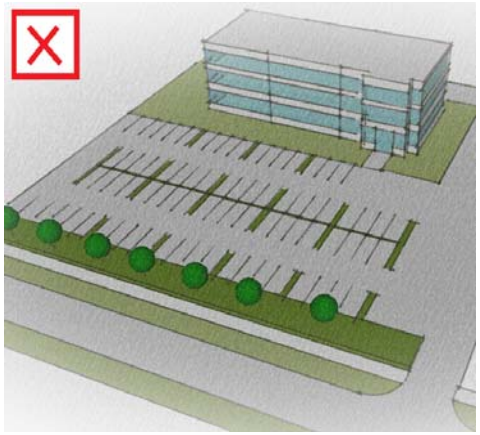
Building orientation on Corner Plots

6.12 On corner plots adjacent to a relevant highway an office or research and development building can be orientated towards either or (ideally) both streets. Design Code RH7 provides more specific design rules for office and R&D buildings positioned on corner plots adjacent to a relevant highway.

RH3 - General parking layout principles for office and research and development buildings

Where office and research and development buildings are positioned adjacent to a relevant highway the majority of staff parking to serve these buildings will be located to the rear, behind the frontage building enclosing the highway.

Limited parking along a development frontage. The majority of parking placed behind a frontage building so as not to dominate the character of the public realm



Large areas of staff parking along development frontages is not permitted as this dominates the character of the street and reduces the potential for natural surveillance.

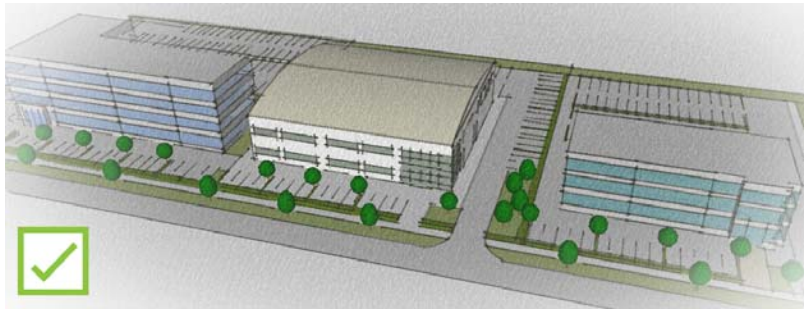
Rationale

6.13 Positioning the majority of staff parking behind office and R&D buildings can ensure that parking areas do not visually dominate the public realm. It also allows buildings to be drawn close to the public highway. This increases natural surveillance and legibility in an area and can significantly enhance the character of the streets. This rationale is illustrated in the conceptual drawings of the Urban Boulevard shown top right.

Rationale behind design code RH3 illustrated through concept for Urban Boulevard. Frontage office and R&D buildings drawn close to the street with the majority of staff parking provided behind buildings.

Limited Frontage Parking

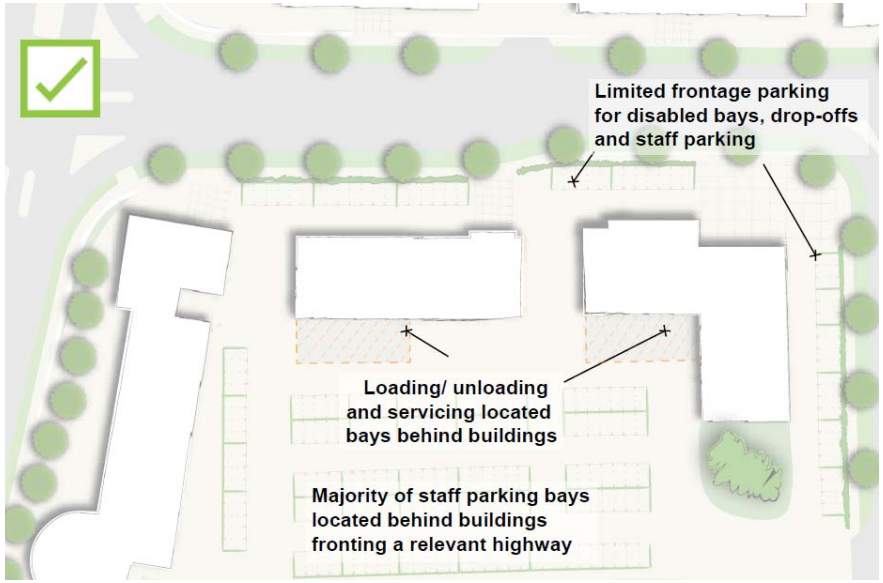
6.14 The potential for limited parking provision along development frontages is permitted by the design code. Some frontage parking will be crucial to ensure ease of access to any disabled parking bays or drop off or set down bays located close to the main entrances of buildings, fronting the street. Parameters for frontage parking are established in chapter 5 and chapter 11.



Example of permitted frontage parking via private slip road access

RH4 - Location of loading and servicing bays for office and R&D buildings adjacent to a relevant highway

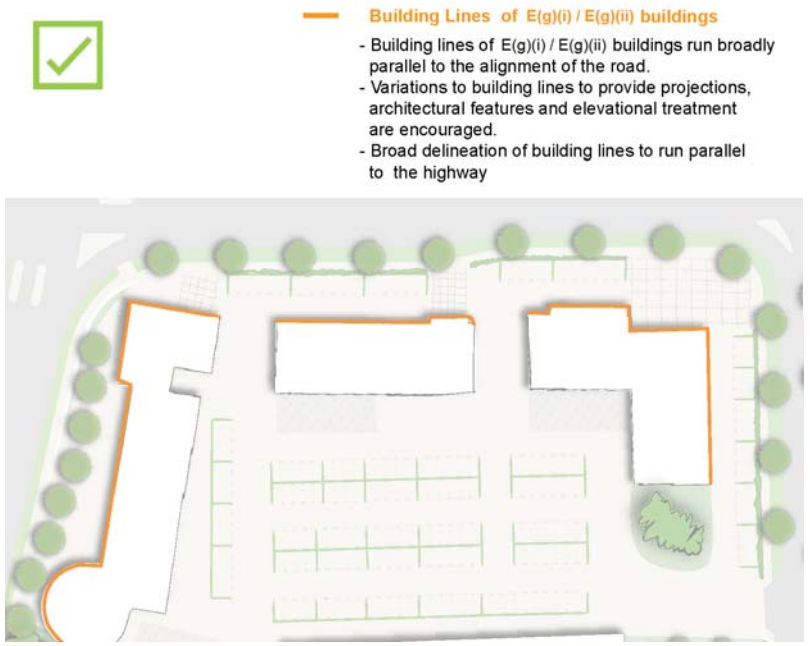
Designated loading, unloading bays and service bays to serve office and research and development buildings positioned adjacent to a relevant highway will be located behind frontage buildings.



RH5 - Building lines of office and R&D buildings adjacent to a relevant highway

a) The building lines of office and R&D buildings located adjacent to a relevant highway should be aligned broadly parallel to the highway.

b) Variations to building lines to allow for projections, recesses, articulation, building entrances and landmark features are encouraged. However, the overall delineation of the building lines should be broadly parallel to a relevant highway.



Rationale

6.15 When building lines and frontage facades are aligned broadly parallel to the street they will enclose the space and significantly enhance the levels of legibility and natural surveillance in an area. This will help to make the street a safer, more attractive, walkable and environment for pedestrians which is easier to navigate through.

RH6 - Principal public entrances to office and R&D buildings adjacent to a relevant highway

Principal public entrances to office and R&D buildings adjacent to a relevant highway should face directly onto the public highway.

Rationale

6.16 Building entrances fronting directly onto the street makes them much easier to locate for visitors and generally improves the legibility of an area. It also helps to generate increased the levels of street activity, vitality and natural surveillance in an area.

RH7 - Office and R&D buildings on designated corner plots adjacent to a relevant highway

On designated corner plots office and research and development buildings should:

a) be located adjacent with the apex or tip of a corner plot in order to acts as landmark / gateway features;

b) provide active frontages wrapping around the corner facing both streets to increase natural surveillance;

c) enhance the visual prominence and legibility of a corner location through the provision of special features such as main entrances, massing, architectural features and articulation.

Corner plots are defined on the Map 1 and comprise frontage buildings adjacent to the following junctions:

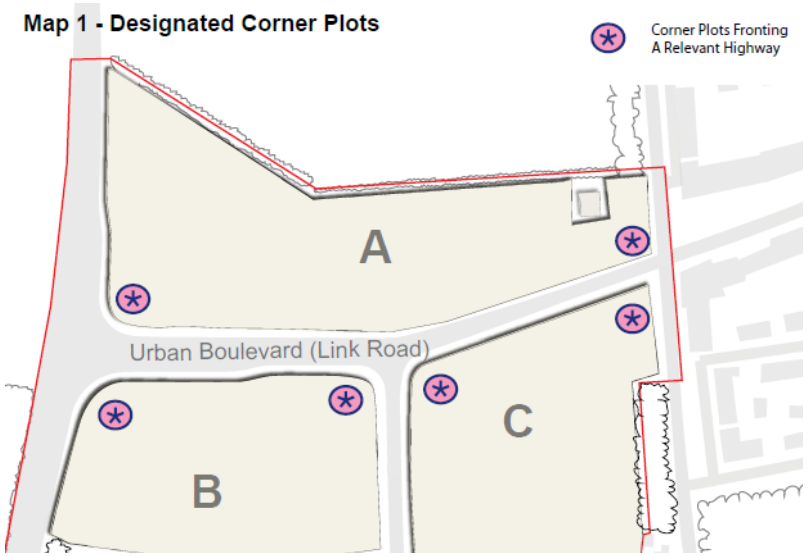
a. London Road / Urban Boulevard junction.

b. A414 / Urban Boulevard junction.

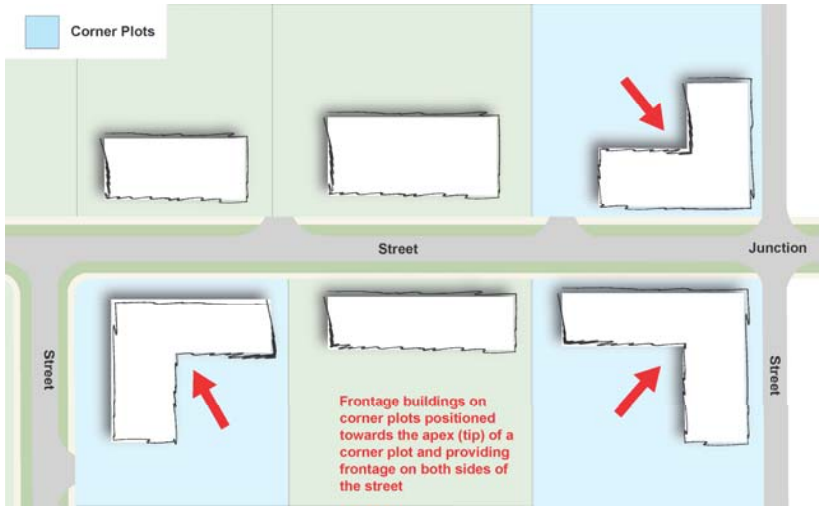
c. Urban Boulevard / Main Employment Avenue junction.

Because of their high profile, street corner locations are often a suitable place for landmark buildings and the main public entrances to buildings.

Corner designations aim to create landmark buildings and well defined gateways into the zone.



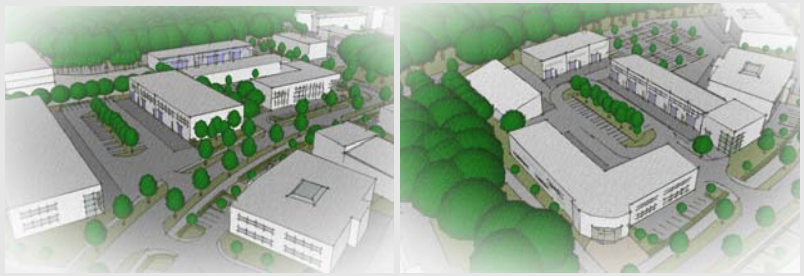
Office and R&D buildings on designated corner plots to 'turn the corner' by wrapping round both sides of the junction.



Positioning office and R&D buildings close to the apex / tip of a corner plot helps to ensure buildings wrap around street corners and create effective landmarks / gateway features at junctions.

Examples of corner buildings wrapping around a corner ('turning the corner') by being placed at the apex of a junction of two roads and providing active frontages facing both streets.

Design codes for industrial buildings adjacent to a relevant highway

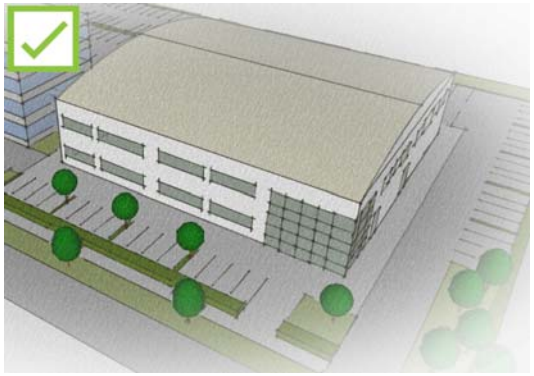


The following design codes (RH8 to RH13) only apply to industrial buildings in E(g)(iii) and B2 use, where these buildings lie adjacent to a relevant highway.

RH8 - Orientation of single industrial buildings on plots adjacent to a relevant highway

Where large industrial buildings are provided on single development plot adjacent to a relevant highway they must be orientated so that they face towards and front the relevant highway. This will be achieved by placing main entrances, windows and office uses on the side of the building facing the highway.

Examples of how large industrial buildings on a single site can be successfully orientated towards the street.



Large industrial buildings can still be orientated so that a an active frontage is created along a relevant highway.

This can be achieved by placing office uses, main entrances and limited parking adjacent to the highway and by locating industrial floorspace, loading and turning space and the majority of staff parking to the rear or side of the building.

RH9 - Orientation of multiple industrial units on plots adjacent to a relevant highway

Where a number of small industrial units are provided within the same development plot adjacent to a relevant highway it will ***not*** be necessary for buildings to be orientated to face the street.

Where a number of small industrial units are provided adjacent to a relevant highway they will not need to be orientated to face the street and may be orientated to face an internal location within a development parcel.

Rationale

6.17 This is because this form of development has specific access and layout requirements which normally necessitate buildings being orientated to face one another, enclosing a central courtyard for loading and vehicle turning (ie. facing away from the street) with multiple businesses sharing a single access point.

6.18 This form of development will be acceptable providing the requirements of design codes RH10, RH11 and RH12 are met.

RH10 - Placement of ancillary office (E(g)(i)) floorspace within industrial and light industrial development adjacent to a relevant highway

a) Where a large industrial building is erected adjacent to a relevant highway any ancillary office (E(g)(i)) uses provided within the building should be positioned so that they front or are adjacent to a relevant highway.

b) Where a number of small industrial units (E(g)(iii)/B2) are provided within a development plot adjacent to a relevant highway it is preferable for ancillary office (E(g)(i)) uses within the industrial unit(s) closest to the highway to be positioned so that they are adjacent to the highway (see photos and illustrative examples bottom right).

Large-scale, single unit industrial development with ancillary E(g)(i) (office) uses positioned on the front face of buildings, providing natural surveillance and overlooking the public highway.

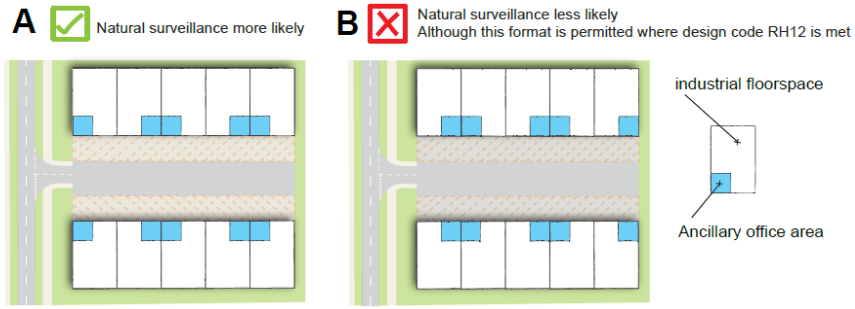
Ancillary office floorspace positioned adjacent to the highway (left photo) can help to provide natural surveillance and overlooking and avoid blank frontages when industrial floorspace is provided adjacent to the highway (right photo).

Rationale

6.19 Placing ancillary office (E(g)(i)) adjacent to the public highway can address issues of blank frontages and provide eyes on the street. This will help to increase natural surveillance and ownership over private frontage areas and site entrances.

6.20 Where multiple industrial units are provided within the same development plot, ancillary office floorspace adjacent to the highway will help to provide overlooking at the entrance to an industrial courtyard. Ideally, office windows should wrap around the corners of the building to provide natural surveillance facing the street (see Option A and photo bottom left).

6.21 Blank industrial facades on this side can create issues with dead frontages, which are only permitted when design code RH12 is met.



Ancillary office floorspace placed adjacent to the highway enhances natural surveillance and ownership of a forecourt and the public realm.

Blank industrial facades adjacent to the highway creates a dead frontage lacking natural surveillance and overlooking. This can be prevented by placing ancillary office floorspace adjacent to the highway at the entrance to an industrial courtyard as shown in the photo to the left.

RH11 – Blank industrial facades

The facades of industrial buildings (E(g)(iii) and B2 uses) adjacent to a relevant highway must provide a minimum window to wall ratio of 15%. Window to wall ratios will be calculated as follows:

Total sqm of windows / total sqm of façade x 100 = active frontage percentage

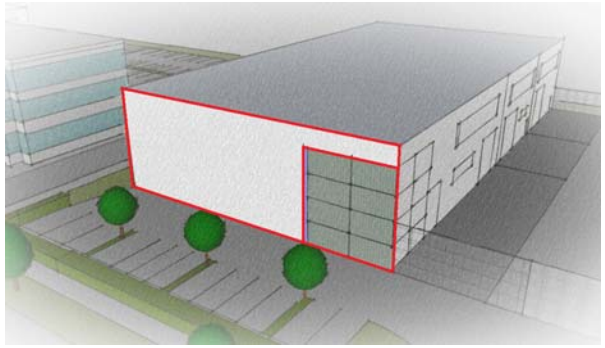
The requirements of this design code may only be varied where the requirements of design code RH12 have been met.

Dead frontages adjacent to the public highway with inadequate landscape screening.

Positioning windows and ancillary office uses adjacent to the highway can avoid large facades of blank frontages.

Rationale

6.22 This requirement will ensure that there is an appropriate level of natural surveillance of the public realm in the interests of community safety. It also ensures that the negative impact of dead frontages and featureless, blank facades are mitigated along key public routes through the enterprise zone area.



Window to wall ratios will be calculated as follows:

Total sqm of windows / total sqm of façade x 100

= active frontage percentage

An example of how to calculate this requirement is shown by red lines to the left.

Illustrative example of industrial facade with a glass to wall ratio of 15%.

Illustrative example of industrial facade with a glass to wall ratio of 30%.

RH12 – Landscape screening of blank industrial facades

Blank industrial facades may be provided adjacent to a relevant highway providing the following requirements are met:

a) blank industrial facades must be set back a minimum distance of 5m from a relevant highway; and

b) a soft landscaping buffer strip of a minimum depth of 3m must be provided between any blank façade and the highway boundary. Soft landscaping buffer strips must include trees and evergreen hedges or shrubbery.

Rationale

6.23 Landscape screening of blank frontages helps to create an attractive park light setting and mitigates the negative impact of dead frontages. As can be seen with the building shown to the right in the above photo, blank frontages aligned close to the highway without sufficient landscaping can have a highly detrimental impact on the character of the public realm. Hence why design code RH12 aims to set back such buildings and ensure they are appropriately landscaped and do not have an overburdening impact on the character of the area.

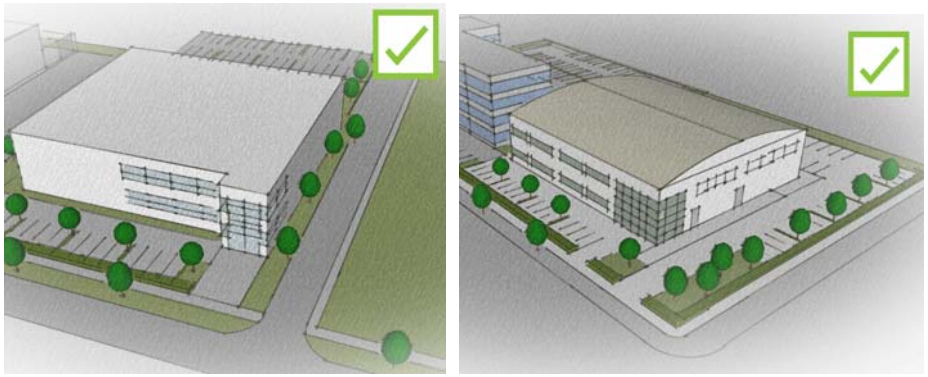
Landscape screening of blank industrial facades will need to be sufficiently dense and include tree planting.

Poor attempts at screening blank industrial facades with landscaping which do not include tree planting will not fulfil the requirements of design code RH12.

Effective street lighting and screening of blank frontages can be achieved by setting buildings and trees slightly back from the public highway.

RH13 - Industrial buildings on designated corner plots

Industrial buildings fronting the highway on designated corner plots should provide either office floorspace, windows, main public entrances or special architectural features adjacent to and fronting the junction. Designated corner plots are shown on map 1 on page 42 and are defined in code RH7.



Industrial buildings on designated corner plots should provide windows, office floorspace and / or main public entrances at the apex of these important junctions.

Locating office floorspace and/ or main public entrances on the apex of any designated corner plot will ensure that windows, natural surveillance and activity is created on high profile and highly visible locations.

Rationale

6.24 Placing ancillary office windows, main entrances and special architectural features close to junction corners will help to ensure that some visual articulation and natural surveillance is provided on these high profile locations which can be expected to experience high numbers of passing pedestrian and vehicle traffic.

6.25 This will also increase the legibility of the area by ensuring important corner locations are defined and articulated, rather than being dominated by dead or blank frontages. Well defined corner buildings at these designated corner plots is an integral aim of the masterplan and will help to create landmark / gateway features at key entrances to the enterprise zone area.

Boundaries and Fencing

Introduction

7.1 The purpose of this chapter of the design code is to establish design principles and parameters to guide the development and erection of site boundaries within the LDO area. It establishes height limits and design standards for site boundaries in different locations within the LDO area.

Background – Permitted development rights under the GPDO

7.2 Schedule 2, Part 2 of The Town and Country Planning (General Permitted Development) Order (as amended) (GPDO) provides planning permission for the erection, construction, maintenance, improvement or alteration of a gate, fence, wall or other means of enclosures, subject to the following limitations:

- any gate, fence, wall or means of enclosure erected or constructed adjacent to a highway used by vehicular traffic must not exceed one metre above ground level.
- any other gate, fence, wall or means of enclosure must not exceed two metres above ground level.

Extensions to permitted development rights through the London Road North LDO

7.3 The LDO extends permitted development rights for the erection or construction of a gate, fence, wall or means of enclosure, subject to the requirements set out in this chapter of the design code.

7.4 This form of development can be undertaken under the following classes within the LDO:

- Schedule A (Building Development), Class 1.3;

- Schedule B (Extensions and Alterations), Class 1.3; and
- Schedule E (Minor Operations), Class 2.

Application of the design code parameters

7.5 The design codes presented in this chapter only apply to development undertaken through classes of permitted development set out in the LDO. They have no impact on development undertaken through permitted development rights in the GPDO or via a planning application. The LDO provides a further layer in addition to existing planning permissions.

Variations to boundary standards

7.6 Complying with the design code standards is a condition attached to classes of permitted development in the LDO. There is a standard procedure for any applicant wishing to remove or vary a planning condition which is established in Section 73 of the Town and Country Planning Act 1990.

How to use this section of the design code

7.7 There are two main elements to this chapter of the code. Design codes B1 and B2 provide specific instructions with respect of boundary landscaping of site boundaries adjacent to a public highway.

7.8 Table A sets out maximum height standards and design parameters for the erection of gates, fences and walls in different locations within the LDO area. These standards extend existing permitted development rights set out in the GPDO and provide certainty to developers about what forms of development can be undertaken through the LDO.

Safety, security and crime prevention measures

7.9 Security is an important consideration and the design and layout of development should minimise the opportunities for crime. The need for businesses in the area to develop premises which meet insurance standards and Secure by Design certification standards or similar is recognised.

7.10 However, the quality of the public realm can be significantly affected by the form of boundary treatments that separate it from land in private ownership. The location and design of fencing can have a highly detrimental impact on the character and appearance of the public realm and people's sense of safety and security when moving through an environment.

Examples of how high security fencing adjacent to a public footway can have a deadening and intimidating impact on the public realm, detrimentally impacting the character and appearance of an area.

7.11 It is not always necessary to turn business premises into a fortress in order to reduce the risk of crime. Target hardening measures which take no account for the quality or attractiveness of the public realm can have a counter-productive impact on safety and security and on the value of capital investments. This is particularly the case in areas dominated by hostile security fencing, lacking in natural surveillance and human activity. These environments can often be magnets for crime and anti-social behaviour, undermining aims to create a secure and high value business environment.

7.13 The design codes in this section therefore aim to balance the need for companies to create secure businesses premises with the need to create an attractive and high quality environment for businesses and pedestrians.

Relationship between development frontages and boundaries

7.14 A development frontage is defined as the area of land between the public highway and a building. The type of development frontages is likely to have a significant influence on the type of boundaries required adjacent to a highway and this is reflected in the design codes in this chapter.

Frontage options

7.15 Tables 5A to 5G of chapter 5 (street and frontage development parameters) establish maximum and minimum set back standards for frontage buildings and appropriate frontage treatments along new and existing highway boundaries and adjoining the public right of way.

7.16 Most frontages immediately adjacent to a relevant highway have relatively generous maximum set back standards of 16.5m. This maximum dimension has been set in order to provide sufficient space for either:

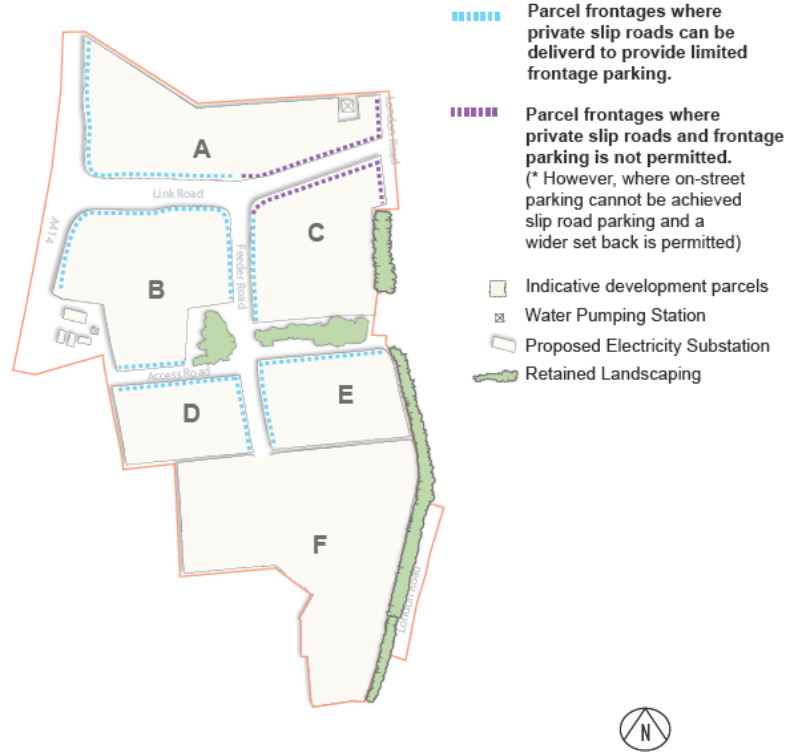
- private slip roads with limited staff, visitor and disabled parking provision; and/or
- open soft landscaping and Sustainable Urban Drainage (SUDs) features.

7.17 A 16.5m set back has been set because this distance provides sufficient space for parking bays, disabled bays, turning space, pedestrian movement and adequate front boundaries in the form of landscape screening.

7.18 The only variation to this general frontage principle is within the Newhall Character Area where development fronts the Urban Boulevard (Link Road). Here, it is envisaged that a tighter sense of enclosure will be created by drawing frontage buildings closer to the street. This precludes the provision of frontage parking and wide building set backs.

7.19 However, there is a feedback mechanism built into the design codes so if on-street parking is not provided along the Urban Boulevard (Link Road) East, then codes allow for limited frontage parking and building set backs to the same standards as set for the Urban Boulevard (Link Road) West.

Developement parcel frontages where private slip road parking can be provided



B1 – Front boundary landscaping adjacent to a public highway in the Development Zone

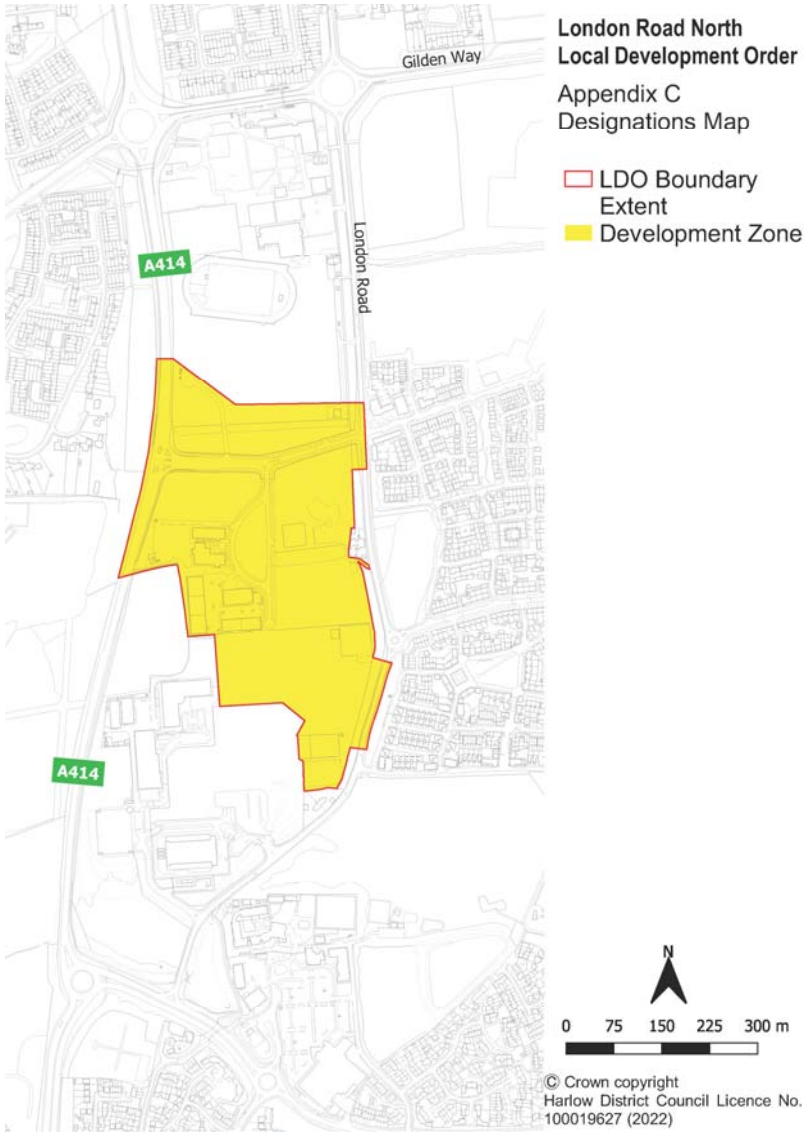
Development adjacent to a public highway within the Development Zone (as defined on Appendix C of the LDO) shall provide landscaped boundaries in accordance with the following requirements:

a) As a minimum, boundary landscaping adjacent to any public highway shall be 2m deep (subject to point c). This area shall comprise an appropriate provision of soft landscaping and incorporate sustainable urban drainage measures, shrubbery and trees.

b) Building projections, entrances, articulation and corner features are permitted within 2m of the highway along certain frontages, as defined in Tables 5A and 5B of Chapter 5.

c) Minimum requirements for boundary landscaping may only be reduced in accordance with design code B2.

Front boundary landscaping helps to provide an attractive business park environment



7.20 Where blank industrial frontages are provided along a development frontage fronting a relevant highway, development must also accord with design code R11.

7.21 Design code B1 does not apply to frontage development along the Urban Boulevard (East) and London Road within the Newhall Approach Character Area. Here, frontage development will have a tighter relationship with the public highway. Basic parameters for this location are set out in Table 3 of Chapter 5 of the design code.

B2 – Front boundary landscape screening of parking bays adjacent to a public highway

Where parking is provided along a development frontage the requirements of design code B1 will not apply and the following requirements must be met:

a) All parking bays should be sufficiently screened from the highway by boundary landscaping/ vegetation. Landscape screening must:

i. comprise a hedge or similarly dense foliage of a minimum height of 1m and a maximum height of 1.25m in order to sufficiently screen parked cars from view;

ii. comprise evergreen / non-deciduous species of hedge in order to provide effective year round screening;

iii. be of a minimum depth of 1m, measured from the highway boundary. (Note that landscape screening boundaries up to 2m in depth will, however, provide more sufficient space for additional tree planting and are encouraged); and

iv. on exposed end parking bays, wrap around the long side of the end parking bay, as shown in the photos A and B).

b) Landscape boundaries may be reinforced by low level fencing of a similar height (as shown in photos A and B).

Additional Guidance

7.22 Landscape boundaries will need to be maintained in accordance with LDO condition H8 to ensure that they do not cause an obstruction to the public highway.

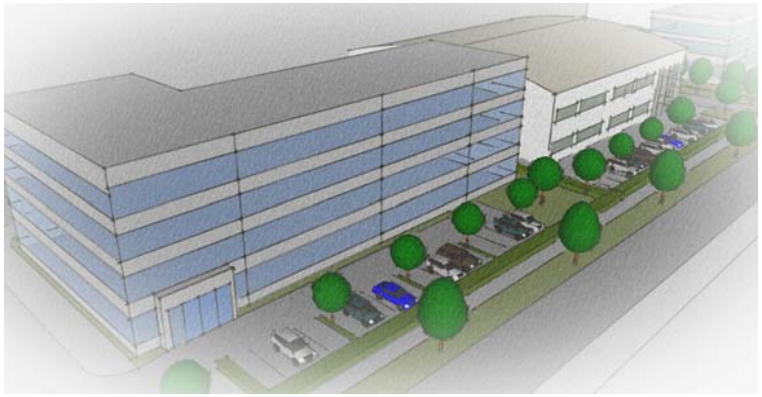
7.23 The placement of boundary hedges will also need to comply with LDO condition H3 and H4 which relate to the provision and maintenance of vehicle and pedestrian visibility splays.

7.24 The dimensions of parking slip roads will need to be designed in accordance with Chapter 11 – Parking Standards and Design.

Photo A - Hedge screening of frontage parking

Photo B – Hedge screening wrapping around the long side of an end parking bay

7 BOUNDARIES AND FENCING



Frontage parking can be provided via slip road access with integrated SUDs features and tree planting.

Design rationale – B2

7.25 The purpose of landscape boundaries is to provide adequate screening of vehicles. The requirements aim to avoid development frontages resembling car show rooms and ensure parked cars do not have a visually dominant impact on the street scene.

7.26 Where they are planted, hedges will make a significant contribution to the overall business park character.

7.27 The maximum height requirements have been set to ensure that screening allows for natural surveillance of the street. This will enable some visual interaction between the street and frontage development and enhance the character, safety and attractiveness of the public realm.

An example of how landscape screening, SUDs, soak away areas and additional tree planting can help to:

- **adequately screen parked vehicles;**
- **contribute to the business park character; and**
- **ensure sufficient natural surveillance and visual interaction between building frontages and the public realm.**

An example of how 1m to 1.25m hedge landscaping can ensure adequate natural surveillance between frontage buildings and the public footway

7 BOUNDARIES AND FENCING

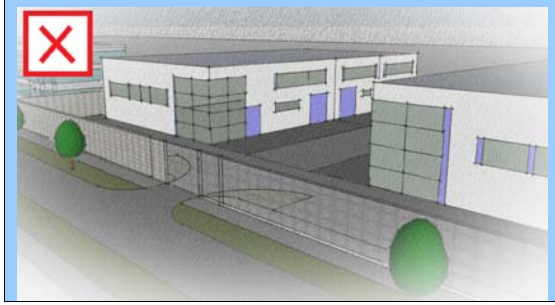
Requirements for fencing, railings, gates and walls

7.28 Design code requirements covering the erection of fencing, railings, gates and walls when undertaken through the LDO are set out in Table A, B and C.

7.29 LDO permitted development rights for fencing, railings, gates and walls are set by character area (see pages 17 to 20 for definitions).

Table 7A - Gates, fences, railings or walls adjacent to a public highway

Location	Max Height	Permitted Forms / Location
Adjacent to a public highway **(Note that public highways include right of ways and pedestrian / cycle paths)**	2m	• Visually permeable fencing, railings or gates. • Must be erected no more than 3m of any highway boundary, unless erected on the side of buildings and set back at least 2m from the frontage building line. • Security fencing must be buffered by a minimum 3m soft landscaping and planting set back strip which shall run between a fence and the highway. • Gates at vehicle entrance points must be set back at least 6m from the carriageway to allow vehicles to enter sites without causing an obstruction on the highway.



Security fencing not permitted adjacent to the public highway where it is not buffered by a 3m strip of landscaping.

2m fencing permitted adjacent to a highway where it is buffered by a 3m strip of landscaping.

The following examples explain the design rational behind these requirements.

An example of how landscaping strips comprising hedges, planting and trees can mitigate the impact of security fencing and help to enhance the character of the public realm and create a high value business park setting.

7 BOUNDARIES AND FENCING

Guidance - Private frontage parking in the form of a slip road and parking bays can help to prevent security fencing from dominating the public realm and increase human activity and natural surveillance adjacent to the highway.

Table 7B - Gates, fences, railings or walls not adjacent to a public highway on any side and rear boundary

Location	Max Height	Permitted Forms / Location
Side boundary of any site which is not adjacent to a public highway	2.5m	• Visually permeable fencing, railings or gates.
Rear boundary of any site which is not adjacent to a public highway.	2.5m	• Visually permeable fencing, railings or gates.
(Note that public highways include right of ways and pedestrian / cycle paths)		

8 DELIVERING THE MOVEMENT FRAMEWORK

Introduction

8.1 The purpose of this section of the design code is to orchestrate the delivery of essential road infrastructure highlighted in the masterplan and movement framework.

8.2 Design codes in the section establish broad parameters to enable the construction of these necessary highways works. They have been framed in order to provide sufficient flexibility and room for manoeuvre to stakeholders involved in the delivery of this development on the ground. They are sufficiently precise so as to fulfil the requirements for the discharge of planning permissions and ensure that infrastructure is delivered in an appropriate manner.

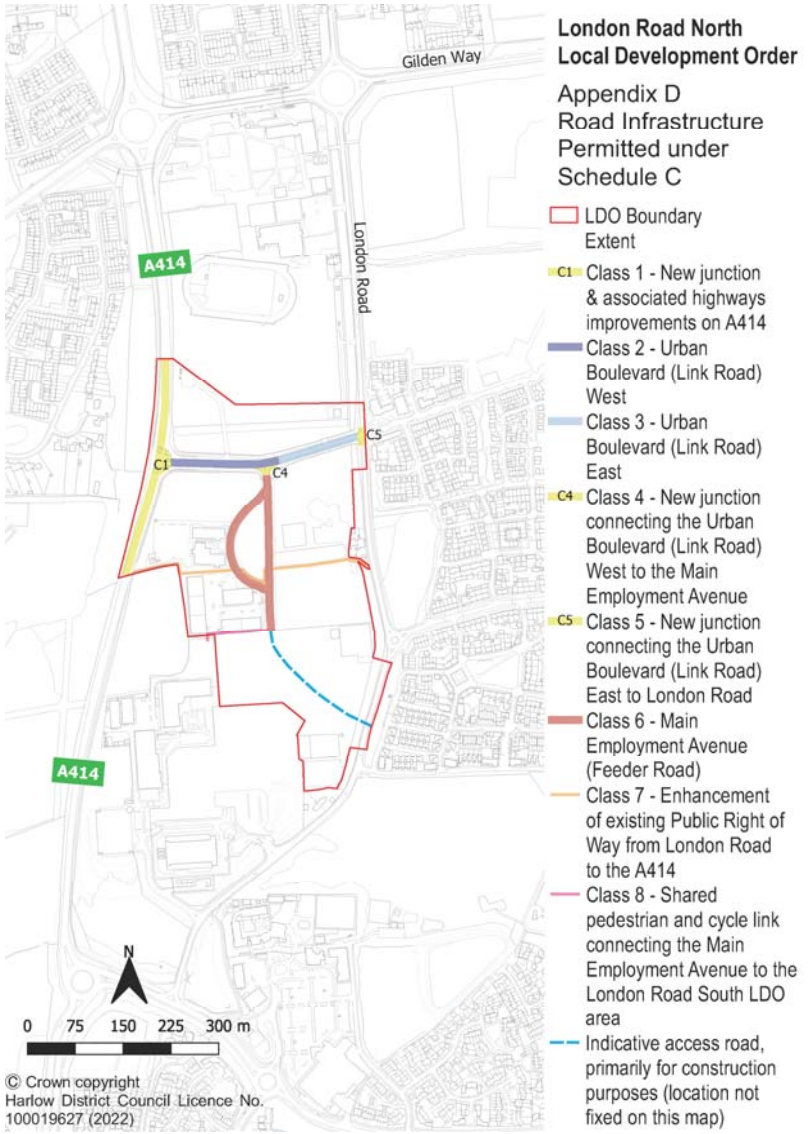
New movement infrastructure

8.3 The masterplan identifies a range of movement routes and new junctions which are critical to achieving a fully accessible and connected development. These items of road infrastructure are essential in order to:

- connect the site to the local and strategic highway network;
- ensure efficient connections are made through the site to allow land parcels in different ownership to be released for development; and
- facilitate the provision of efficient and direct bus and cycle routes which can plug into Harlow's existing public transport network.

Relationship to planning permissions granted in the LDO

8.4 These items of infrastructure are granted planning permission in Schedule C of the London Road North LDO and defined in Appendix D of the LDO (see map to the right). This chapter needs to be read in conjunction with Schedule C and Appendix D of the LDO (see map right).

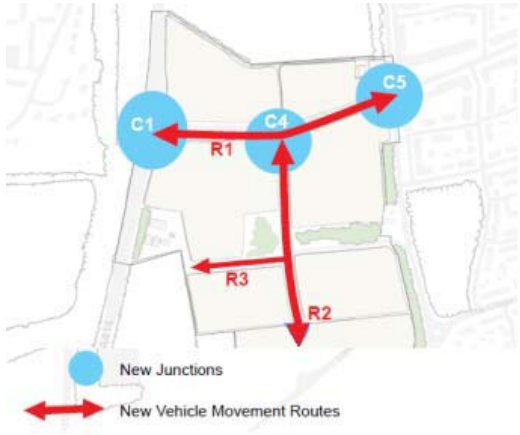


Other highways consent requirements

8.5 Although planning consent is provided through the LDO and Design Code, landowners and developers are advised that will need to pursue other forms of consent associated with the Highways Act. The Council's intention is for these broad parameters to work alongside the street and frontage design standards set out in chapter 5 and any adoption or other legal requirements undertaken in accordance with the Highways Act.

Structure of this section

8.6 This chapter contains seven design codes. The first four design codes enable the provision of new junctions. The final three design codes in this chapter establish requirements for the construction of the three main movement routes through the enterprise zone. These new routes will connect up these junctions, providing access to development parcels within the LDO area, helping to plug the site into the surrounding urban area.



New Junctions

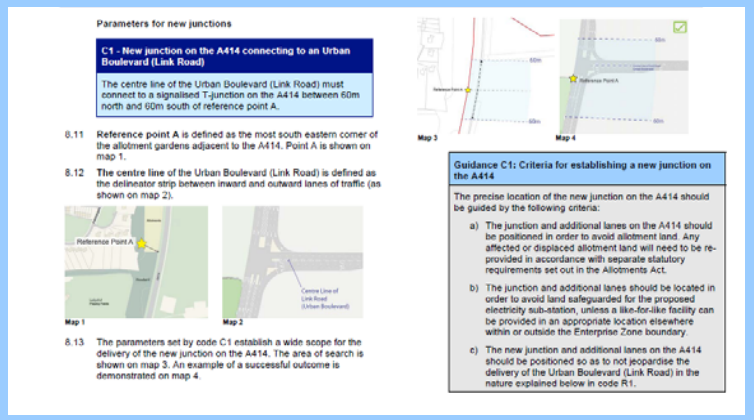
8.7 Codes C1, C4 and C5 establish parameters to guide the delivery of new junctions constructed under class 1, class 4 and class 5 of Schedule C of the LDO.

New Movement Routes

8.8 Codes M1, M2 and M3 establish a framework for delivering the three main vehicle movement routes through the zone under classes 2, 3, 6 and 8 of Schedule C of the LDO.

How to use this section of the code

- This section contains design codes and additional guidance.
- The design codes highlight mandatory requirements and are shown in dark and sky blue boxes.
- Supporting definitions and maps are provided for clarity.
- Additional guidance is provided in the grey boxes with blue headers. These boxes inform stakeholders of issues and, in some instances, explain the reasoning behind parameters.


Parameters for new junctions

C1 - New junction on the A414 connecting to an Urban Boulevard (Link Road)

The centre line of the Urban Boulevard (Link Road) must connect to a signalised T-junction on the A414 between 60m north and 60m south of reference point A.

8.11 Reference point A is defined as the most south eastern corner of the allotment gardens adjacent to the A414. Point A is shown on map 1.

8.12 The centre line of the Urban Boulevard (Link Road) is defined as the delineator strip between inward and outward lanes of traffic (as shown on map 2).

Map 1 Map 2 Map 3 Map 4

8.13 The parameters set by code C1 establish a wide scope for the delivery of the new junction on the A414. The area of search is shown on map 3. An example of a successful outcome is demonstrated on map 4.

Guidance C1: Criteria for establishing a new junction on the A414

The precise location of the new junction on the A414 should be guided by the following criteria:

a) The junction and additional lanes on the A414 should be positioned in order to avoid allotment land. Any affected or displaced allotment land will need to be re-provided in accordance with separate statutory requirements set out in the Allotments Act.

b) The junction and additional lanes should be located in order to avoid land safeguarded for the proposed electricity sub-station, unless a like-for-like facility can be provided in an appropriate location elsewhere within or outside the Enterprise Zone boundary.

c) The new junction and additional lanes on the A414 should be positioned so as to not jeopardise the delivery of the Urban Boulevard (Link Road) in the nature explained below in code R1.

Parameters for new junctions

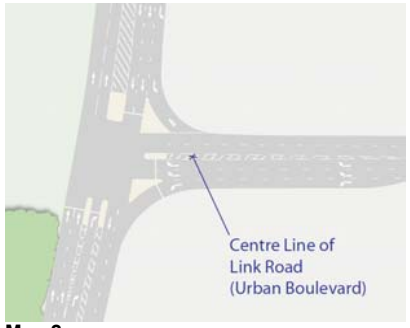
C1 - New junction on the A414 connecting to an Urban Boulevard (Link Road)

The centre line of the Urban Boulevard (Link Road) must connect to a signalised T-junction on the A414 between 60m north and 60m south of reference point A.

8.11 **Reference point A** is defined as the most south eastern corner of the allotment gardens adjacent to the A414. Point A is shown on map 1.

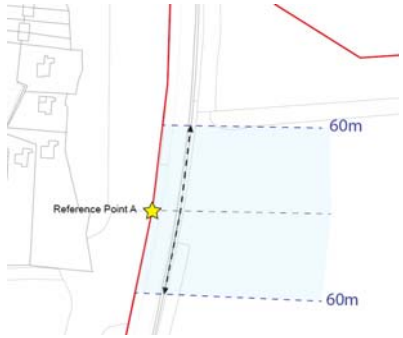
8.12 **The centre line** of the Urban Boulevard (Link Road) is defined as the delineator strip between inward and outward lanes of traffic (as shown on map 2).

Map 1

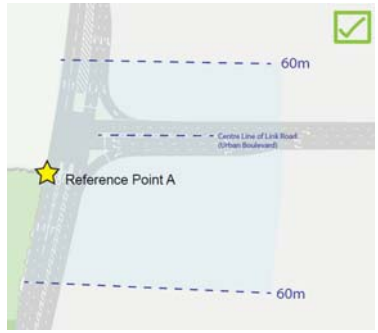


Map 2

8.13 The parameters set by code C1 establish a wide scope for the delivery of the new junction on the A414. The area of search is shown on map 3. An example of a successful outcome is demonstrated on map 4.



Map 3



Map 4

Guidance C1: Criteria for establishing a new junction on the A414

The precise location of the new junction on the A414 should be guided by the following criteria:

a) The junction and additional lanes on the A414 should be positioned in order to avoid allotment land. Any affected or displaced allotment land will need to be re-provided in accordance with separate statutory requirements set out in the Allotments Act.

b) The junction and additional lanes should be located in order to avoid land safeguarded for the proposed electricity sub-station, unless a like-for-like facility can be provided in an appropriate location elsewhere within or outside the LDO boundary.

c) The new junction and additional lanes on the A414 should be positioned so as to not jeopardise the delivery of the Urban Boulevard (Link Road) in the nature explained below in code M1.

C5 - New junction on London Road connecting to the Urban Boulevard (Link Road)

The centre line of the Urban Boulevard (Link Road) must:

a) connect to a junction on London Road between 90m and 170m north of reference point B; and

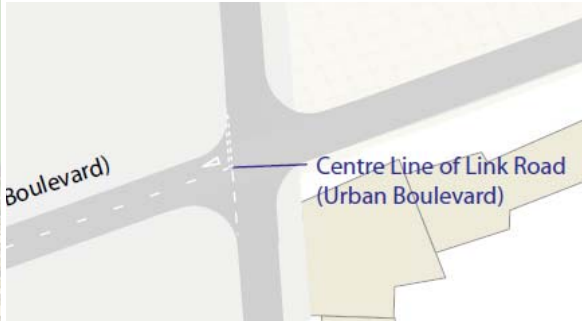
b) connect to Newhall Primary Road Network (proposed bus route).

8.16 **Reference point B** is shown on map G below and is defined as the northern boundary of Newhall Cottages and is shown on map 7.

8.17 **The centre line** of the Main Employment Avenue is illustrated on map 8.

8.18 The parameters set by code C5 establish a wide scope for the delivery of the new junction. The area of search is shown on map 9.

Map 7



Map 8

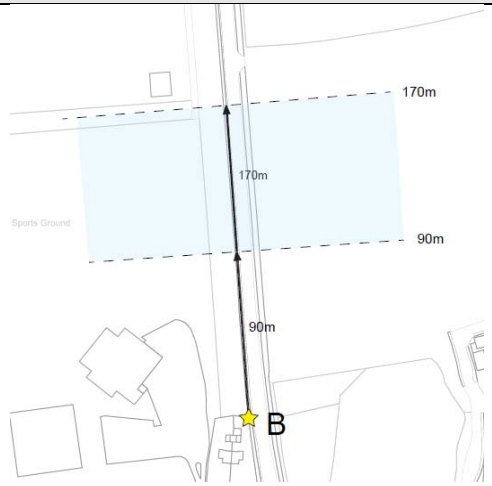
Guidance: Criteria for establishing a new junction on London Road connecting to Urban Boulevard (Link Road)

The precise location and design of the new junction on the A414 will need to be guided by the following criteria:

a) the location of the junction and the link road approach will need to avoid the existing water pumping station – safeguarded infrastructure.

b) the junction will need to be located sufficiently south of the existing water pumping station in order to accommodate 3 to 4 storey buildings which turn/ wrap the corner.

c) the location of the junction and the Urban Boulevard along Newhall Approach Character Area will need to allow the Urban Boulevard to join Newhall Primary Road Network (proposed bus route) and flow through Newhall neighbourhood centre at this location.



Map 9

Parameters for new routes:

M1 - Urban Boulevard (Link Road)

The Urban Boulevard (Link Road) must:

a) provide a direct and continuous road connection between the A414 (C1) and the Newhall Primary Road Network (proposed bus route) (C5).

b) be designed in accordance with the street specification standards set out in table 5B and table 5C of chapter 5 of this design code unless otherwise agreed with the Local Planning Authority, in consultation with the Highway Authority.

Illustration of proposed Urban Boulevard (Link Road)

Guidance M1: Criteria for establishing the Urban Boulevard (Link Road)

The precise route and design of the Urban Boulevard (Link Road) will need to be guided by the following criteria:

a) The Urban Boulevard should located sufficiently far south to result in a development parcel to the north (parcel A) which provides sufficient space for buildings within the targeted sectors with associated parking and loading areas to the rear. Parcel A will need a sufficient depth to accommodate 3-4 storey frontage buildings in E(g)(i) (office) or E(g)(ii) (R&D) use or buildings in B1c (light industrial) use with varying depth requirements.

b) The Urban Boulevard should located sufficiently far south to ensure that the delineation of the road avoids the existing water pumping station – safeguarded infrastructure – unless a like-for-like replacement facility can be provided elsewhere.

c) The Urban Boulevard should be designed to provide a slight change in direction. This will be achieved by either kinking or curving to the north. A change in the direction of the road is essential for the following reasons:

   i. To ensure that the route of the road avoids the water pumping station (as explained in point b).

   ii. To create more sufficient space to the rear of buildings (as explained in point a).

   iii. To create an appropriate point of transition between a 4 lane dual

carriageway (11m-15m) road and a single lane carriageway (6.75m) road.

iv. To prepare (slow down) vehicles before entering Newhall residential area and neighbourhood centre / shared space area at London Road.

v. To create the opportunity for a landmark/ marker building on the corner of the Urban Boulevard /Main Employment Avenue junction. This landmark/ marker building will terminate westbound views along the Urban Boulevard and along the Primary Road Network Route through Newhall Phase 2 and from the proposed neighbourhood centre.

Illustration of proposed Urban Boulevard (Link Road) viewed from Newhall Phase 2 neighbourhood centre towards the A414. Bringing the Link Road further south provides a development parcel suitable for B1 buildings with associated parking. It also ensures that the development can wrap around and avoid the water pumping station and connect with the Newhall Phase 2 masteplan and primary road network. Kinking the Urban Boulevard will ensure traffic is calmed and slowed down as it enters the proposed neighbourhood centre.

M2 - Main Employment Avenue (Feeder Road)

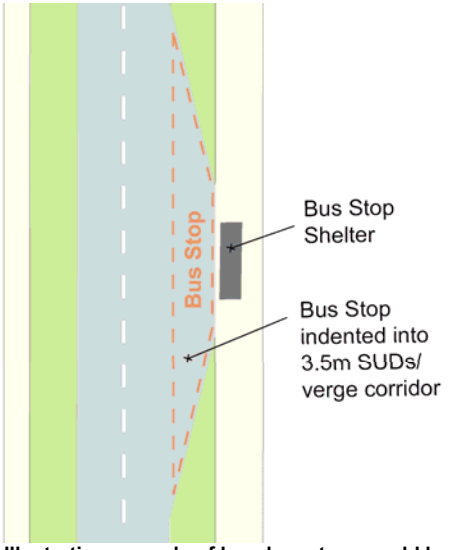
The Main Employment Avenue (Feeder Road) must:

a) connect junction C4.

b) provide a direct and continuous road connection between the Urban Boulevard (Link Road).

c) be designed in accordance with the street specification standards set out in table 5D of chapter 5 unless otherwise agreed with the Local Planning Authority, in consultation with the Highway Authority.

d) At points chosen in consultation with the Highway Authority and Local Planning Authority provide suitable places for bus stops, shelters and telematics.



Illustrative example of how bus stops could be integrated into SUDs corridor provided along the Main Employment Avenue.

Guidance M2: Criteria for establishing a Main Employment Avenue (Feeder Road)

The Main Employment Avenue (Feeder Road) will need to run through the central landscaping belt of TPO trees which runs through the centre of the site. However, it should run through the middle of this tree corridor in order to preserve the more mature and dense tree areas to the east and west of this central tree belt.

Illustrative example of the Main Employment Avenue showing how street should run through the centre of the LDO site and cut through the middle of the tree belt thereby preserving the more mature trees located here and ensuring this landscaping asset is retained and enhanced as an integral feature of the masterplan.

M3 – Access Road aligned adjacent to the existing Public Right of Way

A new Access Road must:

a) be constructed to the west of a new junction connecting it with the Main Employment Avenue (Feeder Road);

b) be constructed so that its centre line is within 15m north and 15m south of the existing Public Right of Way;

c) run broadly adjacent or parallel with the defined Public Right of Way; and

d) be designed in accordance with the street specification standards set out in table 5E of chapter 5 unless otherwise agreed with the Local Planning Authority, in consultation with the Highway Authority.

Illustrative example of Access Road aligned adjacent to the right of way

9 SITE ACCESS & JUNCTION SPACING

Introduction

9.1 The purpose of this section of the design code is to provide broad parameters to enable to discharge of planning permission for site access from the highway. This is provided for in Classes 1.3 and 2.3 of Schedule A and 1.3 of Schedule B of the LDO.

9.2 In some instances the standards presented in this chapter differ slightly from the standards for major industrial roads in the Essex County Council Development Construction Manual (2012). This is principally to reflect areas of land in different ownership within the LDO area and site constraints such as the existing public right of way and landscape areas. All junction spacing standards are consistent with visibility splays set out in chapter 5.

Highways Act consents

9.3 Developers and landowners are advised that the grant of planning permission through the LDO and design code does not remove the need to obtain highways consent from the County Council and any associated legal agreements under Section 38, Section 184 or Section 278 of the Highways Act.

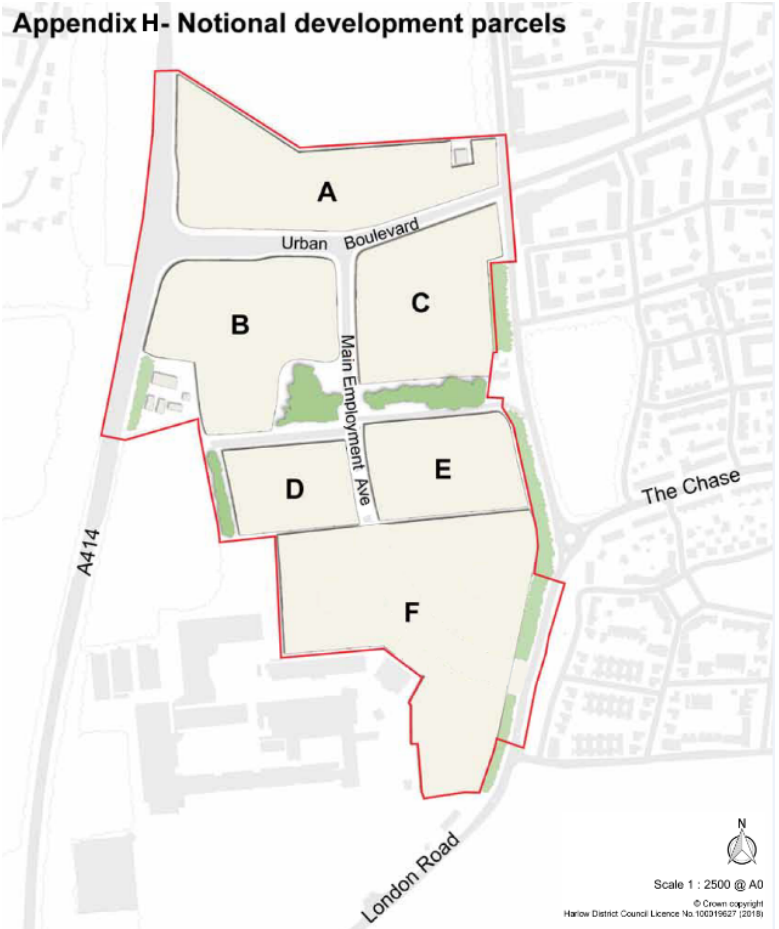
9.4 Any junction adopted through a Section 38 Agreement will benefit from planning permission, even where this does not accord with the broad parameters provided in this section.

9.5 The aim of this section of the design code is to demonstrate that the movement and highways implications of the masterplan have been fully considered and understood. It also aims to draw the attention of stakeholders to some of the highways and access implications for development parcels.

Development parcels

9.6 The London Road Masterplan creates eight indicative development parcels. These development parcels are likely to emerge following the delivery of the necessary items road infrastructure needed to connect the site to the highway network and integrate it with surrounding areas. The creation of the overall movement framework and indicative development parcels has been guided by the areas of different land ownership within the site.

Appendix H- Notional development parcels



NB - Development parcels drawn are indicative and drawn for illustrative purposes. Precise definitions of land parcels are provided in Sections 1.1, paragraph r to x of the LDO Schedule.

Site access along Urban Boulevard (Link Road)

9.7 The development at the Enterprise Zone in addition to the Newhall housing development will generate significant additional traffic flow. Consequently, site access points along the Urban Boulevard (Link Road) must be appropriately spaced to ensure that traffic flows expediently off the A414, into the Link Road and into Newhall and the potential for queuing traffic causing delays back up the A414 at peak periods is avoided.

Indicative site access to development parcel A

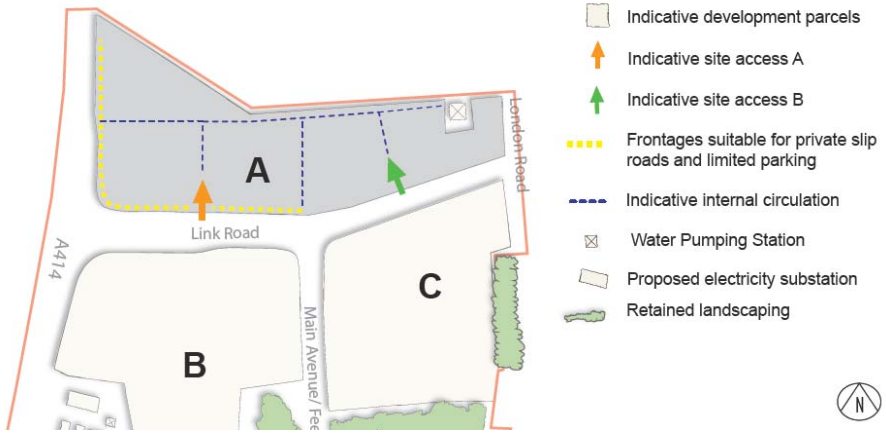


Table 9A – Development Parcel A site access and junction spacing requirements	
Site access to development parcel A	A maximum of two site access points are permitted to development parcel A from the Urban Boulevard (Link Road). This is to ensure efficient traffic flow along Link Road and at A414 junction and in the interests of highways safety.
Indicative site access A	The centre line of site access should be at least 70m from westbound stop line of the Urban Boulevard (Link Road) on A414 to allow for sufficient forward visibility splays and to avoid queuing traffic from backing up into the A414.
Indicative site access B	Site access B should be positioned an appropriate distance from Urban Boulevard (Link Road) / Main Employment Avenue (Feeder Road) junction and Urban Boulevard (Link Road) / London Road junction.

Implications

- Site access points and some internal circulation roads will need to be shared between different sites as a result.
- To cater for this requirement a shared private access road may be provided to the rear of frontage development sites (as shown on illustrative map to the right).
- Private slip roads may need to be provided along development frontages adjacent to the Urban Boulevard (Link Road) and A414 to enable vehicular access, circulation and limited parking close building frontages and avoid impact on the highways.

Site Access A

- Indicative site access A may need to be converted to in-only status at a later stage of the development phase once the Link Road to Newhall / London Road has been constructed in its entirety to ensure safe vehicle movement. This would involve vehicles exiting development parcel A from Junction B.
- Any temporary site access arrangements will need to be agreed in writing with the Highways Authority through the necessary legal provisions contained in the Highways Act and are not therefore stipulated in any way in the LDO or design code.

Indicative site access to development parcel B

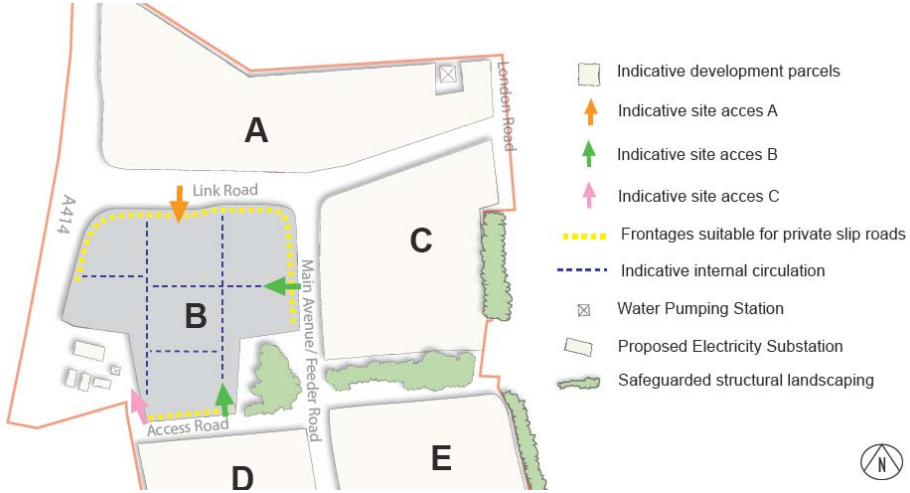


Table 9B - Development Parcel B site access and junction spacing requirements	
Site Access to Parcel B	The main long-term access points intended to serve development parcel B are off the Main Employment Avenue (Feeder Road) or Access Road. A temporary site access to parcel B from the Urban Boulevard may be permitted as an interim arrangement (see right).
Indicative site access A	The centre line of the 'interim' site access A should be at least 60m from the A414 / Urban Boulevard (Link Road) junction.
Indicative site access Bs and C	Minimum distances between centre lines of site access on Main Employment Avenue (Feeder Road) and Access Road are set out in Table 9D.

Implications

- Private slip roads and some shared internal circulation are likely to be required in order to provide access to frontage buildings along A414 and Urban Boulevard (Link Road).
- Prior to the construction of the Main Employment Avenue (Feeder Road), a temporary access point will be needed to provide access development parcel B from the Link Road.

Temporary site access arrangements for Parcel B from Link Road:

- Once the Urban Boulevard (Link Road) is provided in its entirety this access point will need to be either stopped-up or converted to egress (out) only to ensure that the Link Road approaches to the A414 junction function appropriately.
- Any temporary arrangements will need to be agreed in writing with the Highways Authority through the necessary legal provisions contained in the Highways Act and are not therefore stipulated in any way in the LDO or design code.

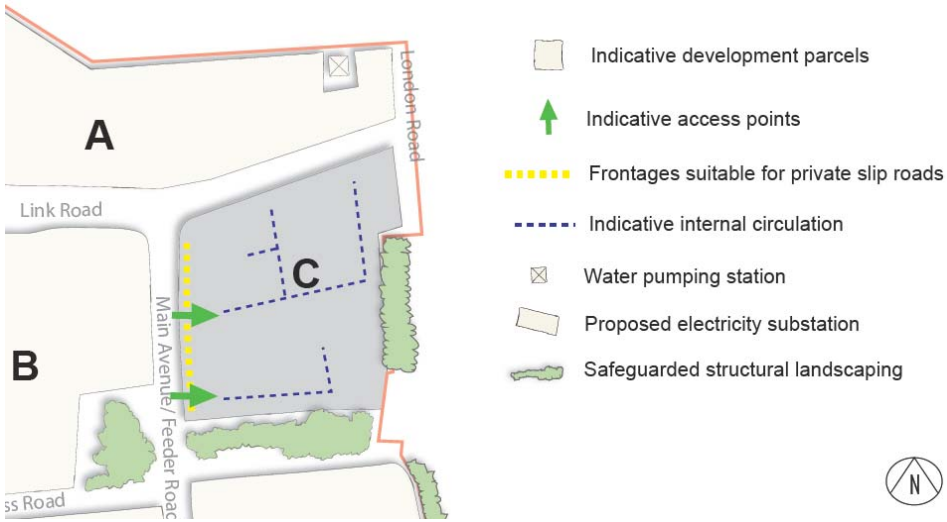
Indicative site access C

- Access either via Access Road or Main Employment Avenue (Feeder Road) will need to provide statutory undertakers with access to the proposed electricity substation.

9 SITE ACCESS & JUNCTION SPACING

Indicative site access to development parcel C

Table 9C - Development Parcel C site access and junction spacing requirements		
Site Access to Parcel C	Vehicular access to parcel C shall be from the Main Employment Avenue (Feeder Road) unless otherwise agreed with the Highways Authority.	
	Minimum distances between centre lines of site access	Minimum distances between centre lines of site access on Main Employment Avenue (Feeder Road) – see Table 9D.



Indicative site access to development parcels off the Main Employment Avenue and Access Road

Table 9D - Main Employment Avenue (Feeder Road) and Access Road - site access Road and junction spacing requirements		
Minimum distances between centre lines of site access on Main Employment Avenue	Same side of road	50m
	Opposite side of road	25m
Minimum distances between centre lines of site access on Access Road	Same side of road	25m
	Opposite side of road	10m

*** Note – The junction spacing standards in this chapter are lower that those contained for major industrial roads in the Essex County Council Development Construction Manual (2012) and this is principally to reflect the areas of land in different land ownership.**

The Access Road is considered to be a 'minor industrial road' in accordance with page 144 of the ECC Development Construction Manual (2012)

10 RESIDENTIAL IMPACT

Introduction

10.1 Two residential properties are located next to the LDO boundary:

- to the south, Maypole Cottages adjoins both the London Road North LDO boundary and the London Road South LDO boundary; and
- to the east of the LDO area, adjacent to the Public Right of Way is New Hall Cottages.

10.2 The rear and side boundaries of these properties lie immediately adjacent to the LDO boundary. It is therefore fundamentally important to ensure that these properties are not negatively impacted by development within the LDO area.

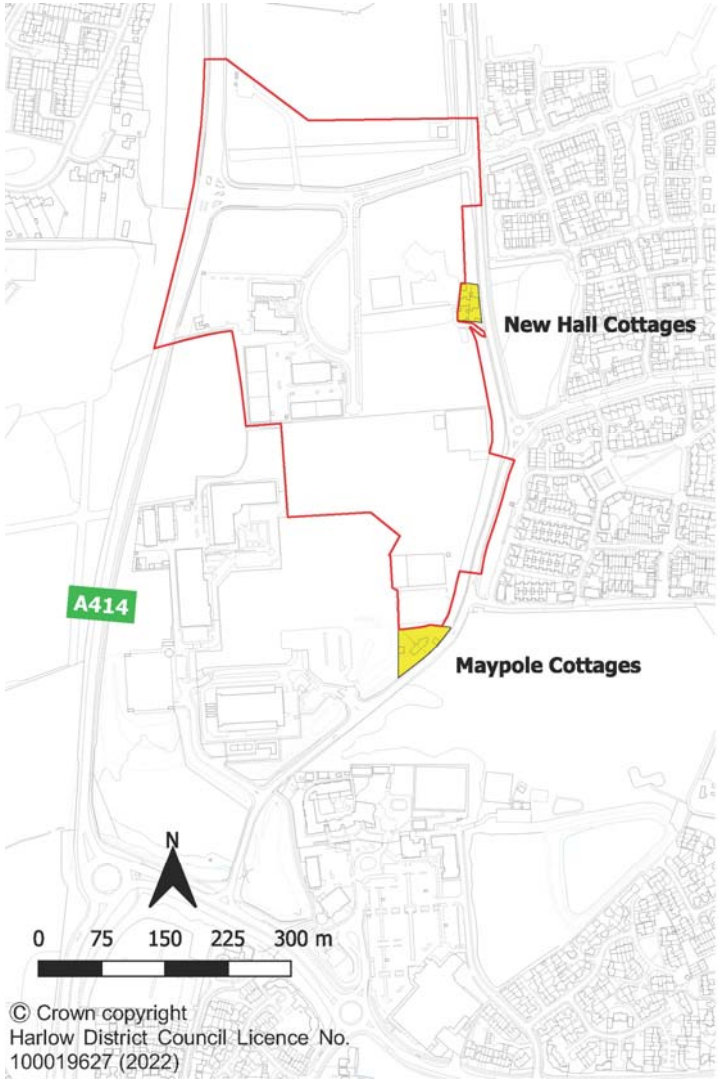
Purpose

10.3 The purpose of this chapter of the design code is to establish standards for business and industrial development in close proximity to the boundaries of these residential properties.

10.4 The intention behind this section of the design code is to provide certainty to private investors and businesses about the form, layout, height and orientation of development and extensions permitted through the LDO in areas close to residential properties. Clear standards are intended to avoid ambiguity and uncertainty and speed up the development process. They also provide assurance to residents who could potentially be negatively impacted by development within the LDO area.

Background

10.5 The design code standards presented in this chapter are based on a thorough appraisal of the potential for a range of environmental impacts affecting these properties. This appraisal has taken into account the particular economic activities targeted by the LDO and the specific context of the site and its existing boundaries.



New Hall Cottages

Maypole Cottages

Photos showing proximity of New Hall Cottages to the LDO boundary.

Photos showing proximity of Maypole Cottages to the LDO boundary.

Design Objectives

10.6 The site analysis and appraisal process led to the following design objectives and priorities which have informed the design codes contained in this chapter:

a) To provide residential properties with sufficient landscape screening in order to provide an appropriate visual and acoustic buffer for properties from enterprise zone activities.

b) To minimise the potential for noise, airborne or light pollution.

c) To provide sufficient privacy for households and prevent overlooking from nearby office and employment buildings.

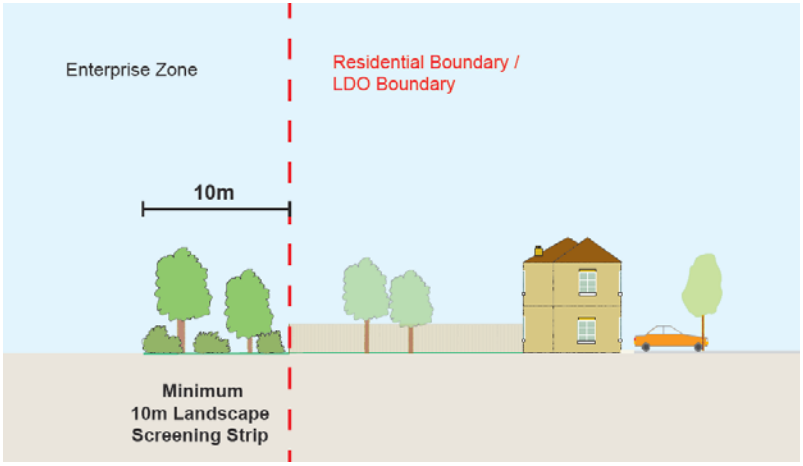
d) To prevent any significant loss of daylight or sunlight.

e) To ensure development does not have an overburdening or detrimental visual impact on the outlook from a home and garden.

f) To prevent negative impacts associated with large vehicles manoeuvring and loading in close proximity to residential dwellings, particularly in relation to noise, disturbance and exhaust emissions.

R1 - Landscape screening adjacent to a residential boundary

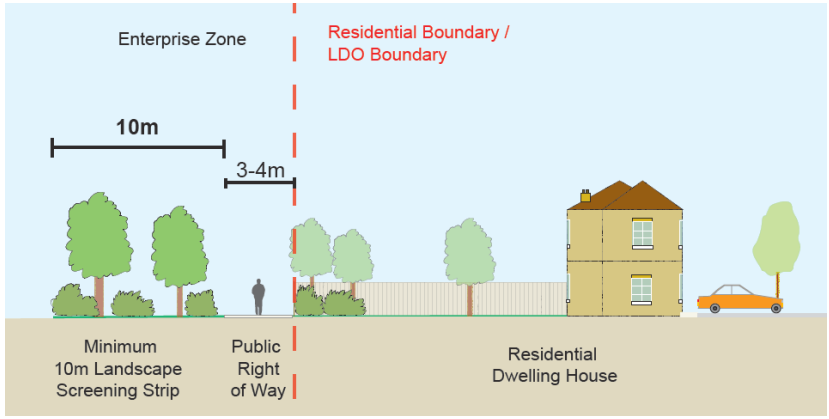
A 10m deep landscape screening strip shall be provided around the perimeter of a residential boundary where the Local Development Order Boundary adjoins a residential boundary.

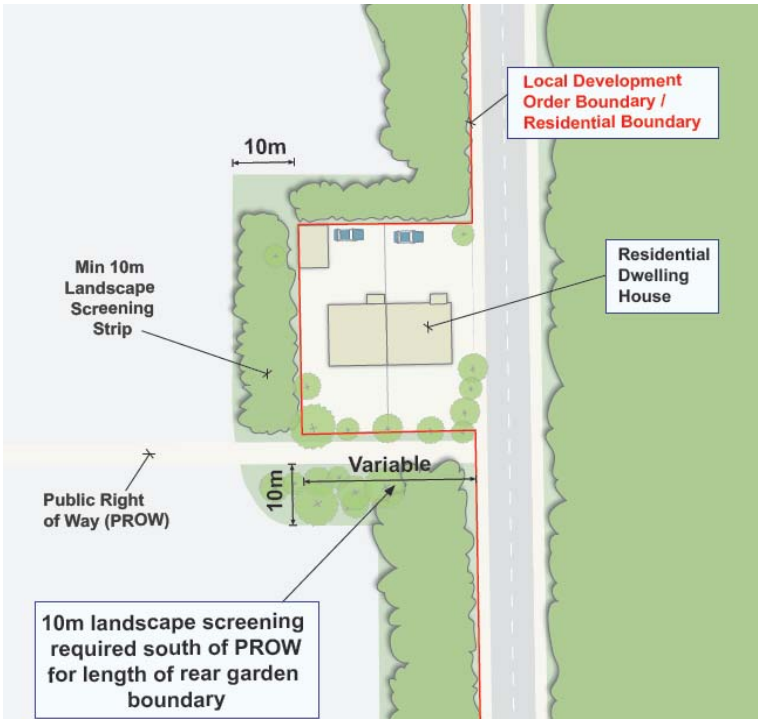


R2 - Landscape screening adjacent to a Public Right of Way and a residential boundary

Where a residential boundary runs immediately adjacent to a Public Right of Way (PROW), a 10m deep landscape screening strip shall be provided south of this PROW.

This landscape screening strip shall run parallel to the PROW and residential boundary wall or fence. As a minimum, the landscape screening strip shall be as long as the residential boundary wall or fence it runs parallel to.





GUIDANCE – Principles guiding the design and maintenance of landscape screening strips adjacent to a residential boundary

10.7 The design and choice of planting in landscape screening strips adjoining residential boundaries will need to be guided by consideration of:

- the proposed adjacent employment use and its associated impacts;
- the degree of screening provided by the existing residential boundary;
- the orientation of a residential building and garden in relation to the direction of daylight and sunlight;
- the location of habitable rooms and windows within a residential property and their distance from the proposed development; and
- surrounding landscape features and any potential opportunities to enhance existing green / biodiversity corridors within the site.

10.8 Any landscape screening shall be designed and planted in consultation with the Local Planning Authority and their appointed arborist. This is required by LDO condition E3 (Detailed Landscaping Schemes).

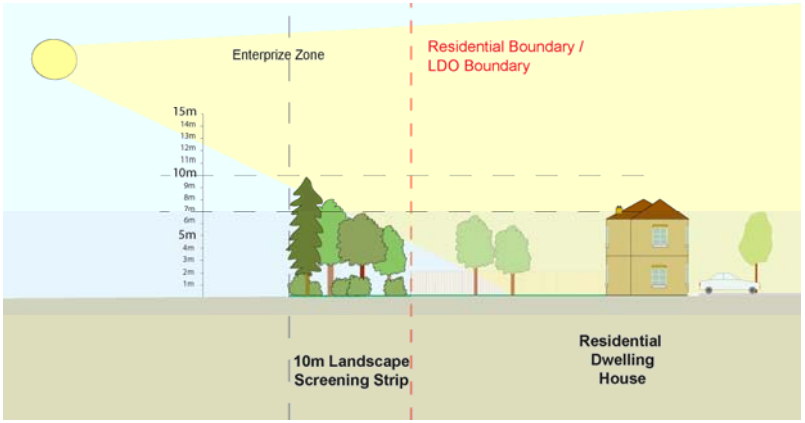
10.9 A landscape screening strip should contain a mixture of deciduous and non-deciduous trees and vegetation of varying heights in order to provide effective visual and acoustic screening all year round.

10.10 Trees within a landscape screening strip should be selected and maintained so that they do not cause significant impacts to the residential properties in terms of overshadowing, loss of light. This will be a significant factor where landscape screening strips adjoin south facing gardens or are close to the windows of habitable rooms within residential buildings.

10.11 Generally, trees should be staggered so that taller trees are provided between 5m and 10m of a residential boundary (as illustrated on the image below).

10.12 Trees planted within a landscape screening strip should be selected and maintained so that they do not exceed 10m in height.

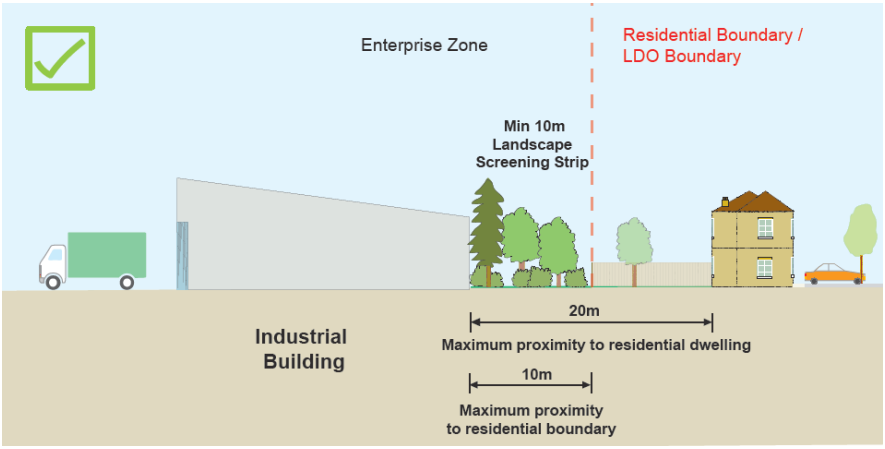
10.13 Any landscape screening strip shall be maintained in accordance with the relevant planning conditions attached to permitted development granted by classes of the LDO.



Illustrative example of how the careful staggering of trees of various heights can achieve sufficient screening but also ensure south facing gardens and habitable rooms receive sufficient sunlight and daylight.

R3 - Industrial buildings adjacent to a residential property

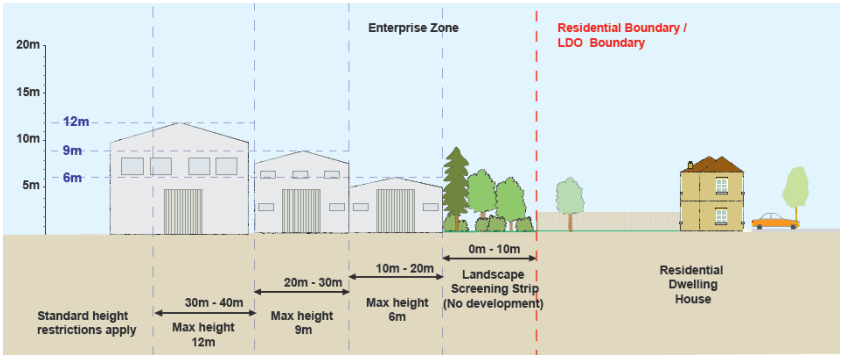
Industrial buildings shall not be erected within 20m of any residential building or within 10m of any boundary of a residential dwelling house.



R4 – Maximum height of industrial buildings in relation to a residential boundary

The maximum height of an industrial building in relation to the boundary of a residential dwelling house is as follows:

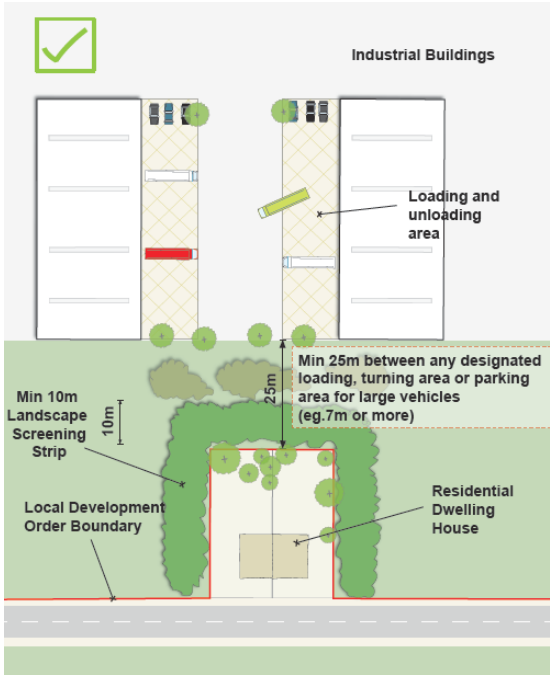
Distance from boundary of a residential dwelling house	Maximum height of light industrial or warehouse building
0 – 10m	No Development
10m – 20m	6m
20 – 30m	9m
30m – 40m	12m

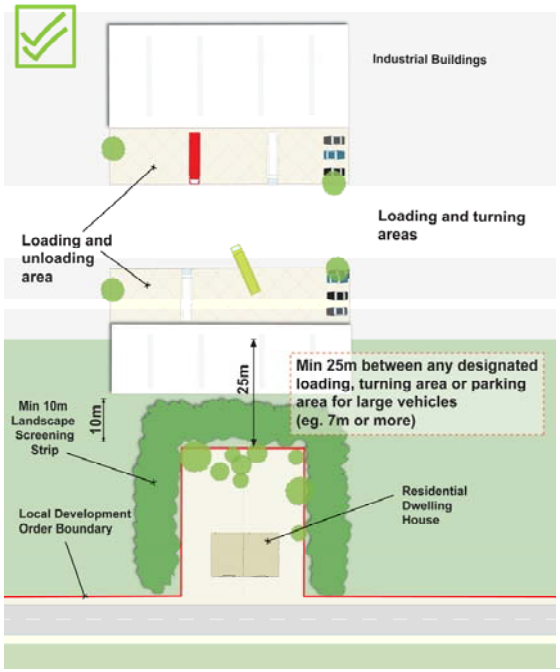


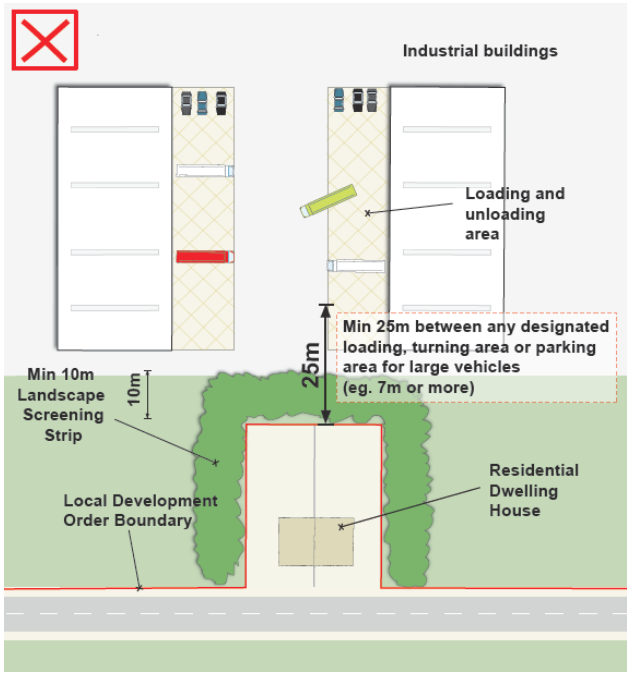
R5 – Large vehicle loading/ unloading and turning areas in relation to a residential boundary

Any designated bays for the parking, loading or unloading large vehicles and areas of hard standing intended for the turning and manoeuvring of large vehicles shall be located at least 25m from a residential boundary.

A large vehicle bay is defined as any bay (not including disabled bays) which are greater than 7m in length.[1]





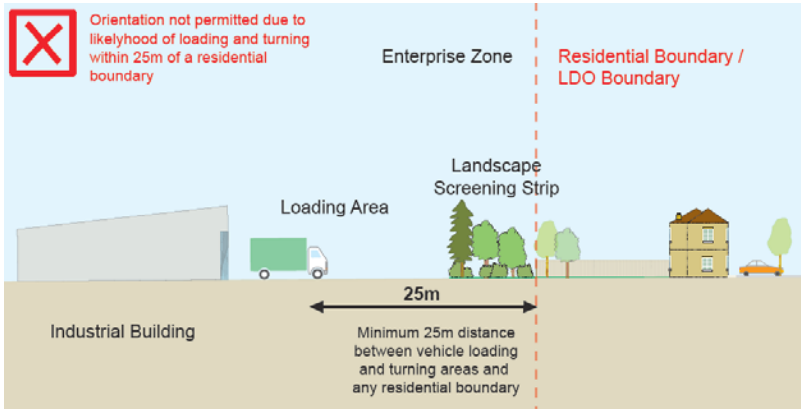


[1] ***Guidance -*** The preferred approach is to use a building to screen residential properties from noise arising from vehicle movements within a site (as shown in the above illustration).

R6 - Orientation of industrial buildings in relation to a residential boundary

Industrial buildings located within a distance of 50m of the boundary of a residential dwelling house must be orientated so that any building façade likely to receive loading or unloading activities should not face directly towards a boundary of a residential dwelling house, unless it is screened by another forward facing building (as shown in illustration D).

A



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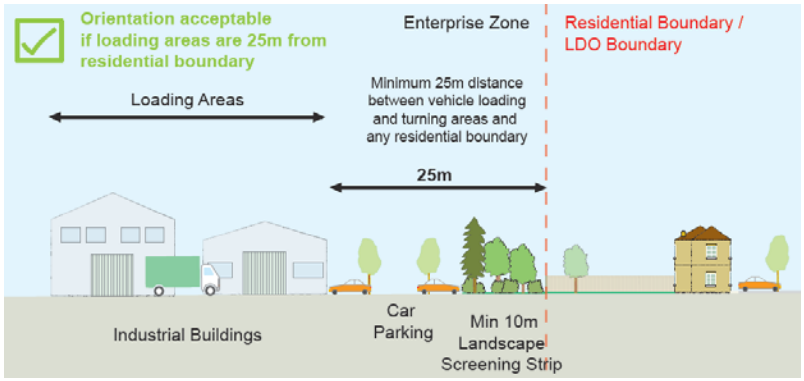

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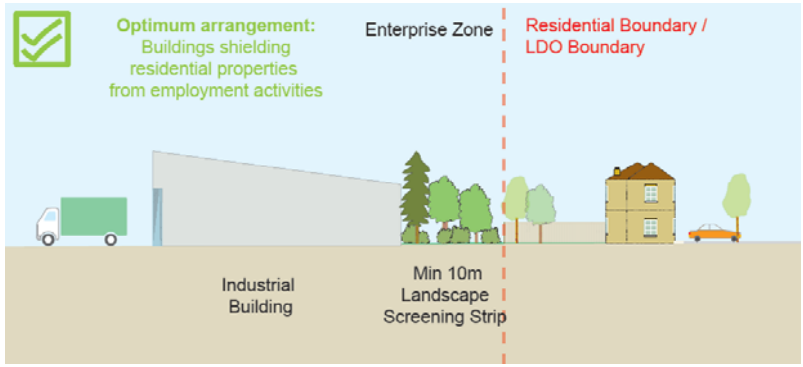
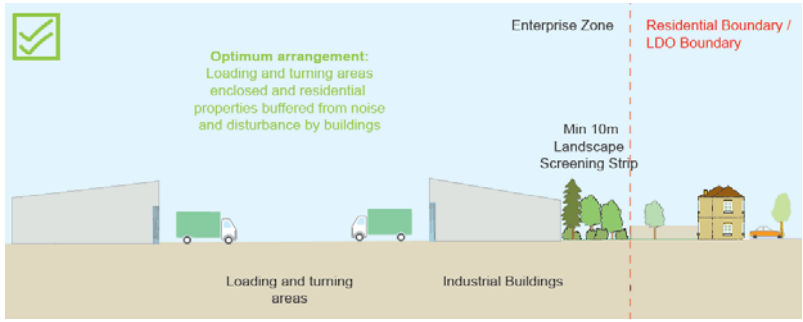


D



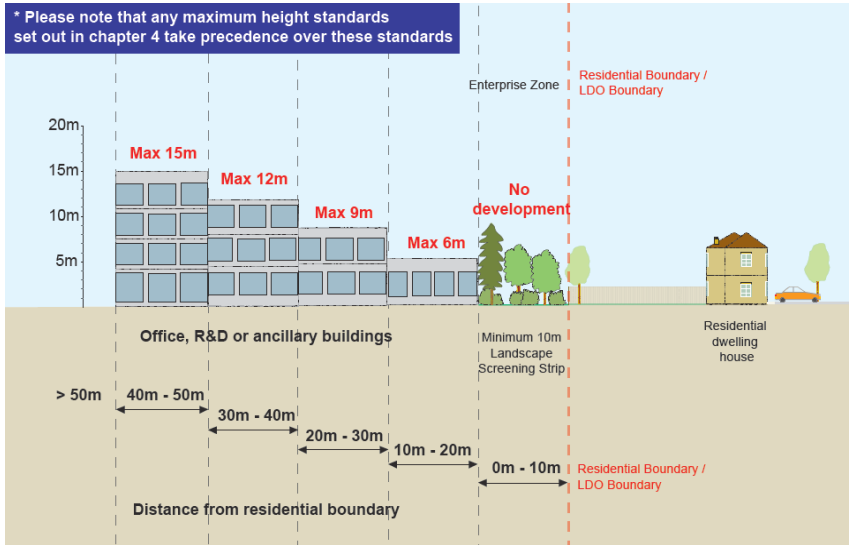
R7 – Office, R&D or ancillary buildings in relation to a residential boundary

No office, laboratory or ancillary buildings shall be erected within 10m of any boundary of a residential dwelling house.

R8 – Maximum height of any office, R&D or ancillary buildings in relation to a residential boundary

The maximum height of any office, R&D or ancillary buildings in relation to the boundary of a residential dwelling house is as follows:

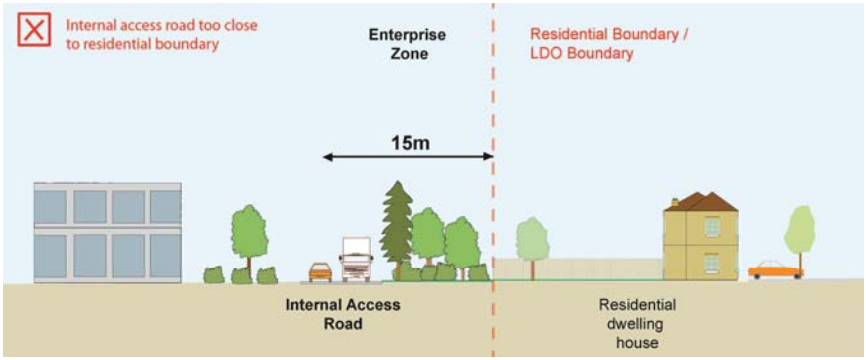
Distance to Boundary of a Residential Dwelling House	Maximum Height of any office, R&D or ancillary buildings	
0 – 10m	No Development Permitted	
10m – 20m	6m	
20m – 30m	9m	
30m - 40m	12m	
40m – 50m	15m	* Maximum building height standards will take precedence when applicable (see Table 4A, page 22)
> 50m	Maximum building height standards apply (see Table 4A, page 22)	



10 RESIDENTIAL IMPACT

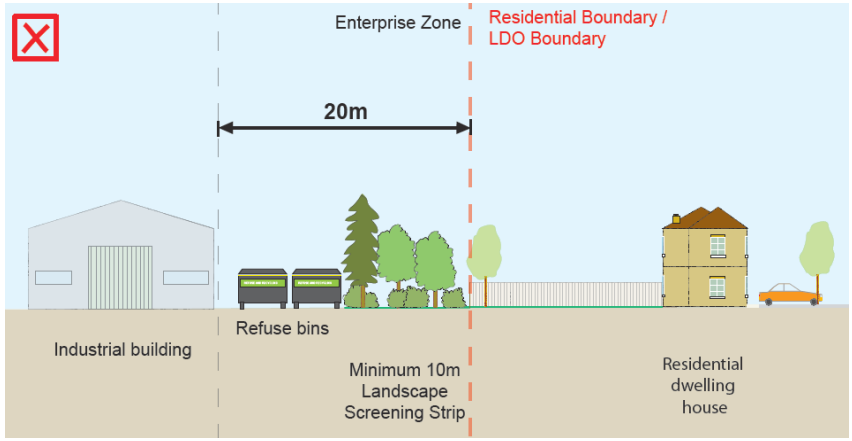
R9 - Internal private access roads in relation to a residential boundary

Any internal private access road within an employment site shall be provided at least 15m from a residential boundary.



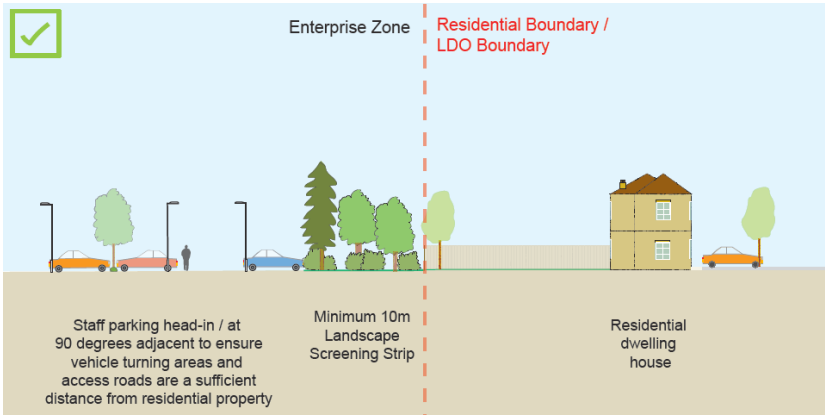
R10 - Refuse areas in relation to a residential boundary

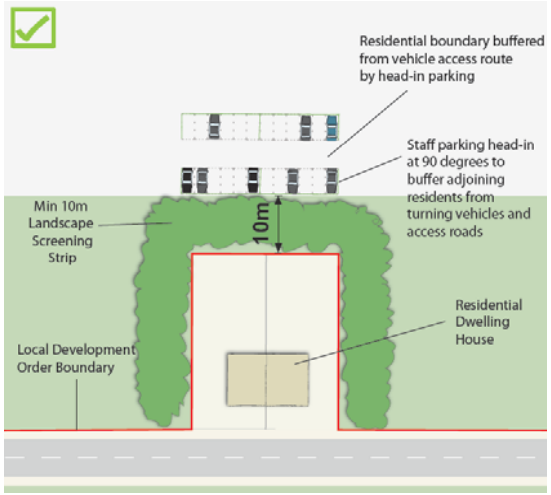
All refuse storage and collection facilities shall be located at least 20m from a residential boundary.



R11 - Staff parking bays adjacent to a residential boundary

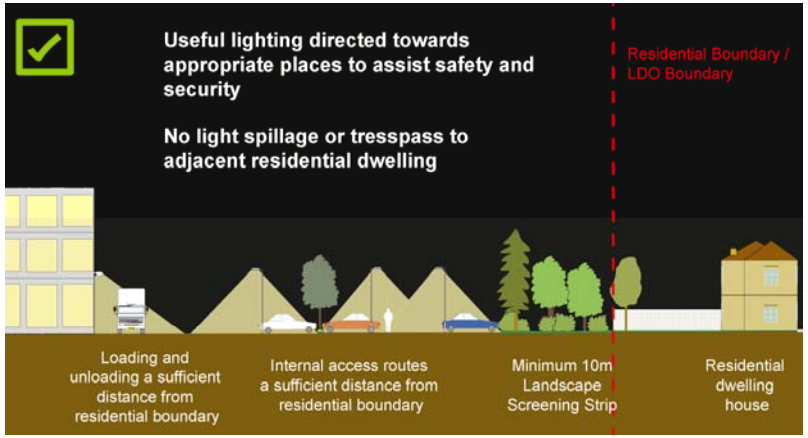
Any staff parking bays provided within 15m of a residential boundary shall be provided head in, at 90 degrees, in order to buffer a residential property from noise generated by turning vehicles accessing parking spaces.



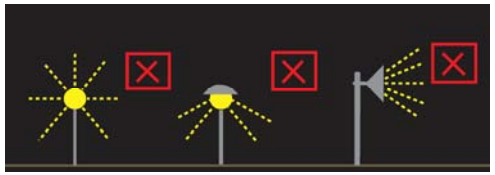


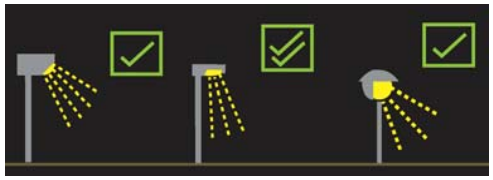
R12 – Design of lighting in relation to a residential boundary

Any lighting devices located within 50m of a residential boundary shall be designed to prevent light spillage, trespass or direct upward light. Useful light directed to appropriate locations is encouraged.



Careful design and orientation of lighting columns adjacent to residential areas can significantly reduce the level of light spillage and trespass. The images below show the types of lighting column designs which will be encouraged and those which are likely to be refused.





11 PARKING STANDARDS & DESIGN

Introduction

11.1 This chapter sets out the parking standards for new development both in terms of provision, dimension and design.

11.2 The following parking standards are presented:

- Maximum and minimum car parking requirements.
- Minimum standards for disabled parking, cycle parking and powered two wheeler parking.
- Permitted design and dimensions for parking bays and turning spaces in car parking and private frontage slip road areas.
- Cycle parking design standards.

Relationship to the LDO

11.3 Planning condition P1 – *Parking Standards for New Development* – is attached to all classes of permitted of development within Schedule A (Building Development), Schedule B (Extensions and Alterations) and Schedule D (Change of Use) of the London Road North LDO. This condition states that development shall not be occupied until the adequate parking provision has been provided, in accordance with the standards set out in this chapter.

Variations to parking requirements

11.4 Requested variations to the parking standards set out in this chapter are not encouraged. However, there is a standard procedure for any applicant wishing to remove or vary a planning condition which is established in Section 73 of the Town and Country Planning Act 1990.

Background to parking standards

11.5 The parking standards contained in this chapter mirror the adopted Essex Parking Standards (2009). Additional parking requirements have been added to these adopted standards. This is to ensure that minimum staff parking standards are applied for business and industrial uses.

The need for minimum vehicle parking standards

11.6 The adopted Essex Parking Standards only contains maximum parking standards for B1 and B2 uses and does not set any minimum threshold for staff parking provision. This was because national planning policy which existed at the time of the document's preparation precluded the use of minimum parking standards.

11.7 The LDO site is adjacent to a number of residential and commercial areas. Therefore, inadequate provision of on site parking within the area could potentially lead an overflow of parking in to the adjacent residential areas. To avoid this spill over effect, it is considered to be essential that adequate parking provision is provided for new developments in the LDO area.

The basis of minimum vehicle parking standards

11.8 The minimum parking standards presented in this chapter have been devised to cater for 50% the expected members of staff generated by different business and industrial land uses. As there is a significant difference in the number of employees generated by office (E(g)(i)), research and development (E(g)(ii)), light industrial (E(g)(iii)) and industrial (B2) uses, the minimum parking standards in this chapter are set to reflect these variations.

11.9 In estimating the likely number of employees generated by business and industrial land uses, the design code has

drawn on published guidance for calculating employment densities.[1]

11.10 In preparing these standards the Council has aimed to balance the need to:

a) ensure sufficient parking is provided within the development site in order to prevent the overspill of staff parking onto nearby residential areas; and

b) ensure that the provisions within the Framework Travel Plan aims for reducing private car use and increasing the uptake of sustainable modes of work-based travel.

11.11 Minimum parking standards effectively set thresholds to ensure that issues relating to parking spill over are addressed. Maximum standards ensure that there is not an over provision of parking and ensure that travel planning, sustainability and traffic management objectives for the enterprise zone can be delivered.

11.12 An alternative considered was to require the provision of the existing adopted Essex County Council maximum standards as a minimum. However this idea was rejected for three key reasons:

- this could lead to an overprovision of parking and inhibit travel planning measures on the site; and
- this could negatively affect the viability of development, particularly on large, complex schemes; and
- because existing maximum standards do not adequately differentiate between the varying employment densities of office, R&D and light industrial E(g) business class uses.

11.13 Having explored this issue in full, the Local Planning Authority has concluded that a framework of maximum and minimum standards provides the optimum degree of control and responsiveness on this issue.

Parking Standards by Use

Parking Standards for Use Class B1 (Business) and B2 (General Industrial)					
Use	**Vehicle**		**Cycle**	**Powered Two Wheeler**	**Disabled**
	Maximum	**Minimum**	**Minimum**	**Minimum**	**Minimum**
E(g)(i) - Office	1 space per 30 sqm	1 space per 38 sqm	1 space per 100 sqm for staff plus 1 space per 200 sqm for visitors	1 space, + 1 per 20 car spaces (for 1st 100 car spaces), then 1 space per 30 car spaces (over 100 car spaces).	**Under 200 vehicle bays in total =** 2 bays of 5% of total capacity, whichever is greater. **Over 200 vehicle bays in total =** 6 bays plus 2% of total capacity.
E(g)(ii) - Research & Development	1 space per 30 sqm	1 space per 50 sqm			
E(g)(iii) - Light Industrial	1 space per 30 sqm	1 space per 50 sqm			
B2 - General Industrial	1 space per 50 sqm	1 space per 60 sqm	1 space per 250 sqm for staff plus 1 space per 500 sqm for visitors		
All requirements are calculated by Gross Floor Area (GFA) of B1 or B2 use.					

[1] English Partnerships (2001) Employment Densities – A Full Guide.
HCA (2010) Employment Densities Guide, 2nd Edition.

Minimum Parking Standards for Use Class D1: Conference Facilities				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
Conference Facilities	1 space per 5 conference seats	1 spaces per 4 members of staff plus visitor parking on individual merits.	1 space, + 1 space per 20 car spaces.	2 bays or 5% of total capacity, whichever is greater.
All requirements are calculated by Gross Floor Area (GFA) of D1 Conference Centre use				

Minimum Parking Standards for Use Class D1: Education and Training				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
C2 and F1(a) - Education and Training	1 space per 15 students for staff + 1 space per 15 students for student parking.	1 spaces per 5 staff plus 1 space per 3 students.	1 space, + 1 space per 20 car spaces.	1 bay or 5% of total capacity, whichever is greater.
All requirements are calculated by Gross Floor Area (GFA) of D1 education and training use.				

Minimum Parking Standards for Use Class D1: Crèche, child care, day nursery				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
E(f) - Crèche, child care, day nursery	1 space per full-time equivalent staff + drop off/ pick up facilities	1 space per 4 members of staff plus 1 space per 10 child places.	1 space, + 1 space per 20 car spaces.	1 bay or 5% of total capacity, whichever is greater.
All requirements are calculated by Gross Floor Area (GFA) of D1 crèche, childcare, day nursery use				

Minimum Parking Standards for Use Class D2: Gym / Swimming Pool				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
E(d) and F2(d) : Gym / Swimming Pool	1 space per 10 sqm of public area	10 spaces plus 1 space per 10 vehicle spaces.	1 space, + 1 space per 20 car spaces.	3 bays or 6% of total capacity, whichever is greater.
All requirements are calculated by Gross Floor Area (GFA) of D2 gym / pool use				

Minimum Parking Standards for Use Class A1: Retail				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
E(a) (excluding food stores)	1 space per 20 sqm	1 space per 400 sqm and 1 space per 400 sqm for customers	1 space, + 1 space per 20 car spaces (for 1st 100 car spaces), then 1 space per 30 car spaces (over 100 car spaces)	3 bays or 6% of total capacity, whichever is greater.
E(a) (Food store)	1 space per 14 sqm			
All requirements are calculated by Gross Floor Area (GFA) of A1 retail use				

Minimum Parking Standards for Use Class A3: Restaurants and Cafes				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
E(b) – Restaurant / Cafe	1 space per 5 sqm	1 space per 100 sqm and 1 space per 100 sqm for customers	1 space, + 1 space per 20 car spaces	3 bays or 6% of total capacity, whichever is greater.
All requirements are calculated by Gross Floor Area (GFA) of A3 restaurant and café use				

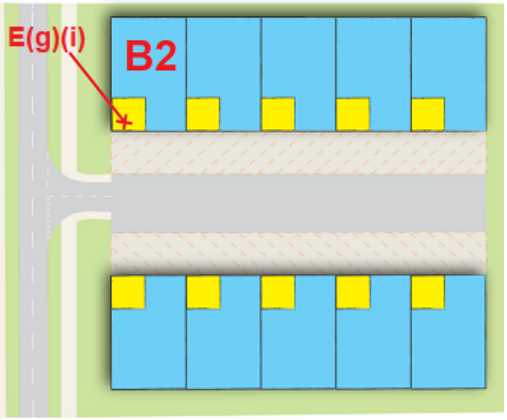
Minimum Parking Standards for Use Class A5: Hot Food Takeways				
Use	**Vehicle**	**Cycle**	**Powered Two Wheeler**	**Disabled**
Hot Food Takeways	1 space per 20 sqm	1 space per 100 sqm and 1 space per 100 sqm for customers	1 space, + 1 space per 20 car spaces	3 bays or 6% of total capacity, whichever is greater.
All requirements are calculated by Gross Floor Area (GFA) of A5 hot food takeway use				

Calculating parking requirements

11.14 All parking requirements are worked out by the gross floor area of a building. The gross floor area of a building refers to the total covered floor area inside the building envelope, including the external walls of the building.

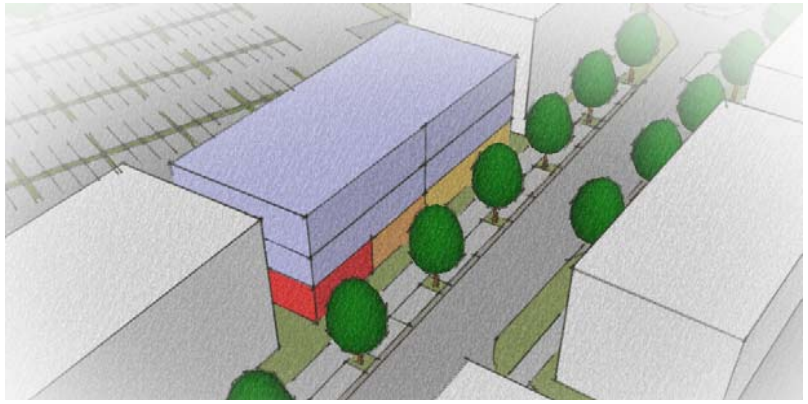
11.15 Where a building comprises a number of floors, the total gross floor area is multiplied by the number of floors, minus any void areas to take account of inconsistencies in the gross floor area of different floors.

11.16 Where industrial buildings include ancillary office space, parking requirements are calculated by reference to the total amount of gross floor area in B2 (industrial) and E(g)(i) (office) as shown below.



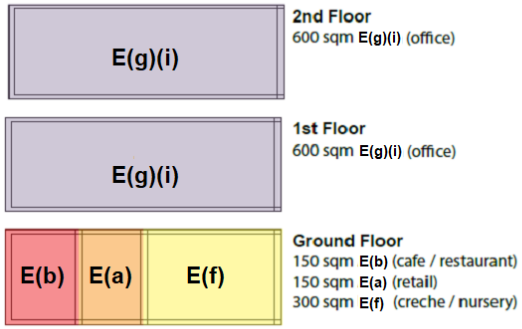
Calculating parking requirements in mixed use buildings

11.17 Where mixed use buildings are proposed with different ground floor land uses, parking requirements are calculated by measuring the total area of covered floor space in each ground floor unit. Individual units should be measured along the centre line of party walls – see example shown to the right:



Example of a mixed use building within the Newhall Approach Character Area

Illustrative Example - mixed use building



Example shows the floor area in each use class must be calculated by measuring gross floor area (the total covered floor area inside a building envelope including the external walls of the building).

The gross floor area of different ground floor uses within the same building shall be measured along the centre line of party walls.

Parking requirements shall then be calculated by dividing the total floor area in each use by the relevant standard.

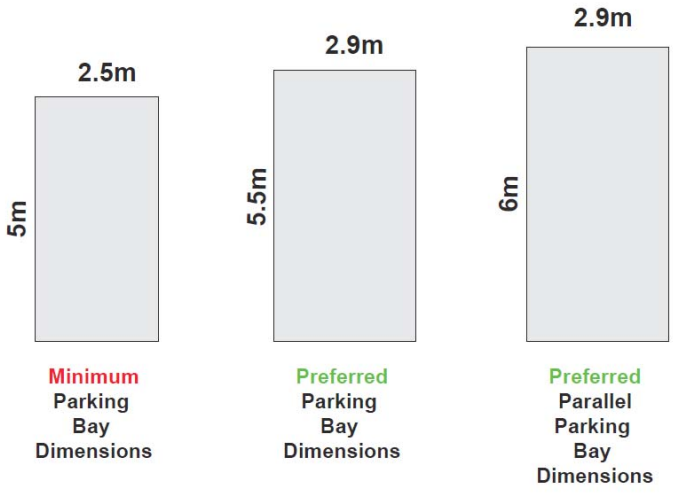
Each requirement will be added together to derive a cummulative requirement for the whole building.

Shared parking areas

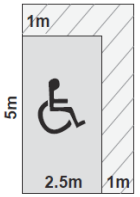
11.18 The masterplanning process undertaken for London Road North has indicated that, within certain development parcels, there may be a need to share parking provision between a number buildings. Where this is the case, parking requirements must be based on the cumulative total floor area of all buildings within a development site in which staff will be using shared parking areas.

Parking bay sizes

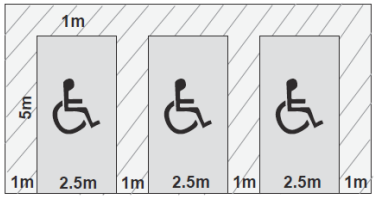
11.19 Parking and disabled parking bays of at least the minimum dimensions shown must be provided in all instances.



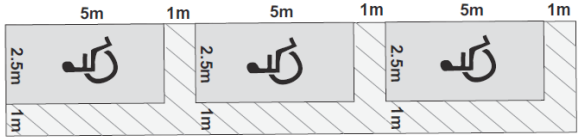
Disabled parking bay design and dimensions



Minimum disabled parking bay dimensions

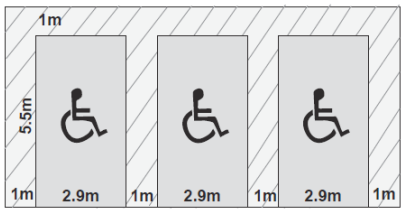


Minimum disabled parking bay dimensions when in perpendicular layout.

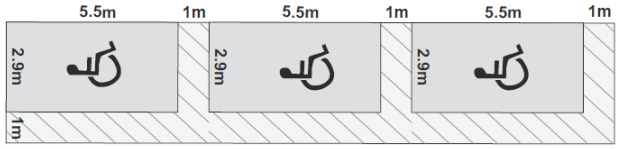


Minimum disabled parking bay dimensions when in parallel layout.

Preferred disabled parking bay dimensions



Preferred disabled parking bay dimensions when in perpendicular layout.

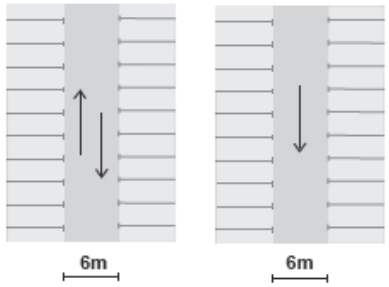


Preferred disabled parking bay dimensions when in parallel layout.

Permitted car park bay arrangements

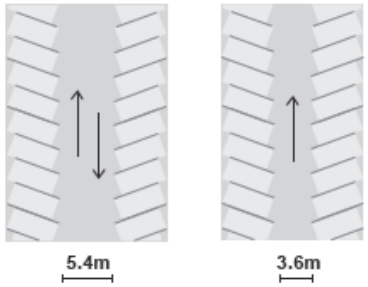
11.20 The following illustrations provide turning space standards for parking bays provided within car parks with development sites.

Parking bays at 90 degrees



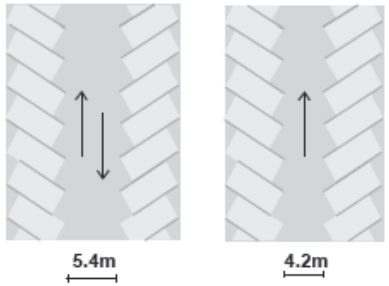
Minimum space required to manoeuvre from bay:
- One-way traffic flow = 6m
- Two-way traffic = 6m

Parking Bays at 45 degrees



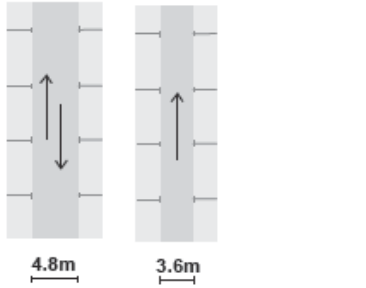
Minimum space required to manoeuvre from bay
- One-way traffic flow = 3.6m
- Two-way traffic = 5.4m

Parking Bays at 60 and 70 degrees



Minimum space required to manoeuvre from bay
- One-way traffic flow = 4.2m
- Two-way traffic = 5.4m

Parking Bays



Minimum space required to manoeuvre from bay
- One-way traffic flow = 3.6m
- Two-way traffic = 4.8

(Source of Minimum Turning Space Standards: CIH&T: Manual for Streets 2: 2010: p82 and Essex County Council Adpoted Parking Standards, 2009)

Frontage parking options

11.21 Frontage parking is permitted by the design code, providing it accords with:

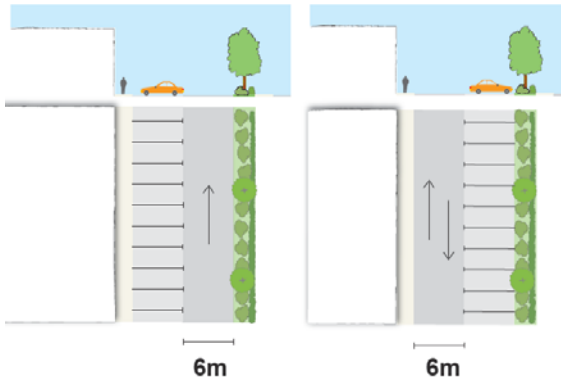
- the design parameters for turning space set out in this section;
- the building frontage and set back parameters in chapter 5 (see tables 5A to 5G); and
- design code B2 in chapter 7.

11.22 Within frontage parking areas adjacent to the highway parking bays may be positioned adjacent to the highway or adjacent to a building, providing the requirements of design code B2 are met in terms of the landscape screening of cars within parking bays.

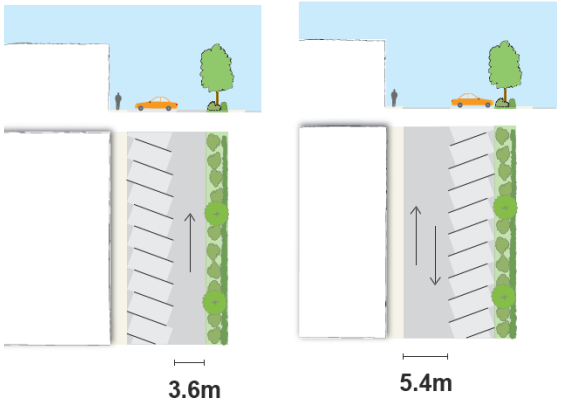
Example of frontage parking

11.23 The options presented in this section provide the potential for one or two-way slip roads. Where one-way slip roads are provided separate vehicle access and egress points must be available and must be clearly signed and restricted.

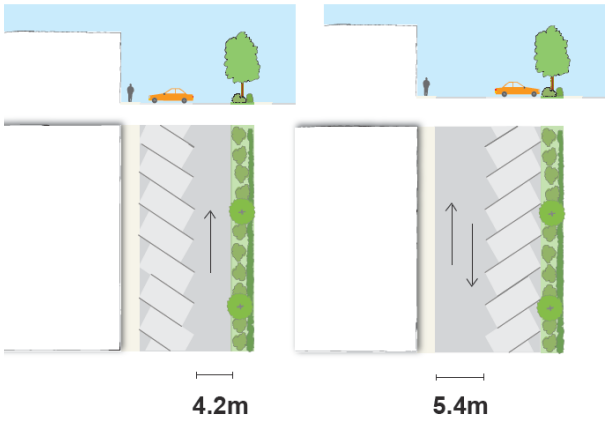
Frontage Parking Option 1
Parking bays at 90 degrees
- Minimum 6m turning space required.



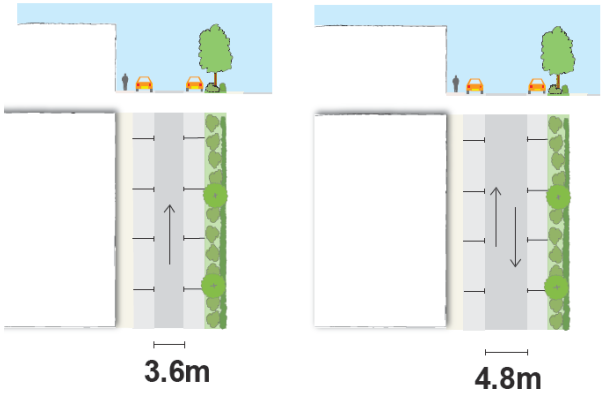
Frontage Parking Option 2
Parking bays at 45 degrees
- Minimum 3.6m turning space required for one-way access route.
- Minimum 5.4m required for two-way access route.



Frontage Parking Option 3
Parking Bays at 60 degrees
- Min 4.2m turning space required for one-way access route
- Min 5.4m required for two-way access route



Frontage Parking Option 4
Parallel parking bays
- Min 3.6m turning space required when one-way vehicle access
- Min 4.8m turning space required when two-way vehicle access
  (a single line of parking bays may be provided along a development frontage)



(Source of Minimum Turning Space Standards: CIH&T: Manual for Streets 2: 2010: p82) and ECC Parking Standards (2009)

Frontage parking options not permitted adjacent to a relevant highway

11.24 The following frontage parking options are not permitted adjacent to a relevant highway (as defined in chapter 6). This is to prevent parked vehicles from having a dominant and detrimental impact on the quality, character and legibility of the public realm along these key movement routes. Building set back standards for frontage buildings set out in chapter 5 and design code RH3 also restrict these practices.

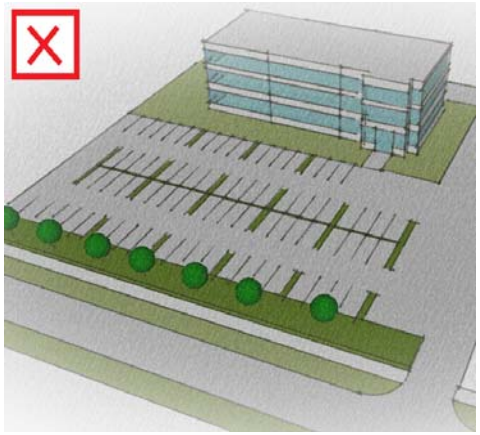
11.25 Greater depths of frontage parking than those permitted in the above section will need to be catered for behind frontage buildings or with a development site.

Rationale:

The majority of parking placed behind a frontage building and only limited parking permitted along a development frontage.

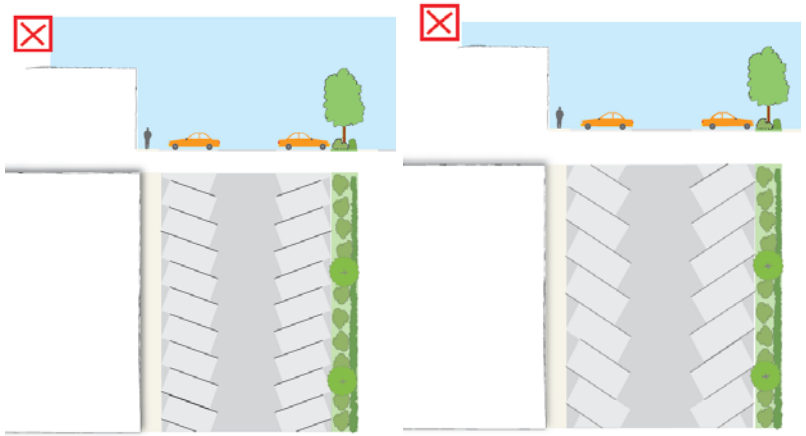
This ensures that parking areas do not dominate the character of the public realm.

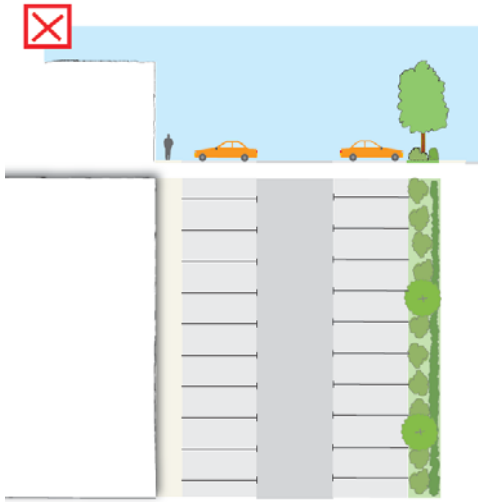
It also enhances the legibility of the area and increases the potential for natural surveillance.



Rationale:

Large areas of staff parking between a building and the public highway is not permitted as very easily dominates the character of the street and also significantly reduces the potential for natural surveillance.





Cycle parking design

11.26 Providing well-located, safe and secure cycle parking is a key factor in encouraging people to cycle as an alternative to using the private car. Businesses should provide a mix of short and long-stay depending on the nature of a business. The following design standards must be met for all new cycle parking:

CP1 - Design principles for cycle parking

a) **Staff cycle parking** provision should:

i. be secure and covered;

ii. benefit from natural surveillance or CCTV;

iii. be well lit; and

iv. be located close to building entrances.

b) **Long stay staff cycle parking** should be located in a secure (locked) covered area to prevent theft or tampering.

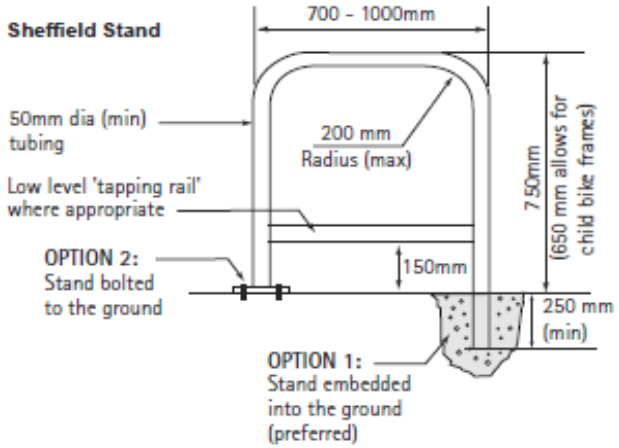
c) **Short stay cycle parking for visitors** should preferably be covered and situated as close to building entrances as possible in order to benefit from natural surveillance and overlooking.

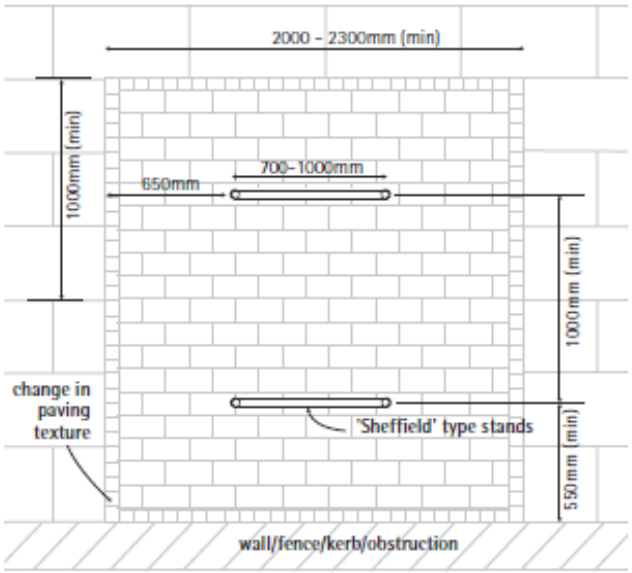
d) **Cycle parking stands** must be designed to ensure that both the front and back wheels of a bicycle can be locked to the stand. Stands that grip only one wheel do not provide adequate support or security. To ensure this is possible cycle stands must be at least 700mm long from bar to bar. Stands should be either bolted or embedded to the ground.

Short stay cycle parking

Long stay staff parking

11.27 The Sheffield stand designs presented below provide additional guidance on the design and spacing of cycle parking stands.





Lorry parking and turning

11.28 The extent to which a business may need to park lorries can only be determined by that business. Consequently, there are no specific requirements for the number of lorry parking spaces for land uses.

11.29 It is important to ensure that lorry parking does not result in the obstruction of the highway and developers must ensure that sufficient turning and parking space is allocated within a development site to facilitate off-road parking and manoeuvring of lorries.

11.30 LDO conditions P2 and P3 require loading, unloading and turning to be undertaken within a development site. They also ensure bays and turning spaces are provided prior to occupation and are sufficient to ensure that vehicles can enter and exit a site in a forward gear (in order to not obstruct the highway).

APPENDIX A - DESIGN CODE INDEX

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Appendix B: Documents which the code has had regard to

12.1 This design code has had regard for the following documents:

- Harlow Design Guide Supplementary Planning Document, 2011
- Harlow Local Development Plan, 2020
- Essex County Council Development Construction Manual, 2012
- The Essex Design Guide and Urban Place Supplement
- Essex County Council Development Management Policies, February 2011
- Essex County Council, 2006, Designing for Cyclists - A Good Practice Guide.
- Essex County Council Street Materials Guide: Design and Good Practice, 2012
- Essex County Council: Sustainable Drainage Systems – Design and Adoption Guide, 2012
- Manual for Streets 2: Wider Application of the Principles
- Design Manual for Roads and Bridges
- Essex Parking Standards Design and Good Practice, 2009
- New Hall Phase 1 and 2 Masterplan and Design and Access Statements
- Harlow Area Investment and Renewal Framework, 2006
- Harlow Area Study: Masterplanning Principles and Sustainability Criteria, 2005
- HM Government, The Building Regulations, Approved Documents A to P


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