MAYOR OF LONDON

London Plan Guidance

Small Site Design Codes

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London Plan Policy	Policy H2 Small sites – Parts (B2 - 4)
Local Plan Making	Where appropriate, planning authorities and neighbourhood planning groups should prepare area-wide housing design codes for a range of 'character types'. This can include identifying and mapping appropriate small sites for residential development and listing small sites on brownfield registers.
Planning Application type and how the London Plan Guidance will be applied	Formally adopted design codes should be used to assess development on small sites[1]. This includes development on windfall sites and those identified as small sites or included in a borough's brownfield registers within the relevant character type.
Who is this guidance for?	Planning authorities and neighbourhood planning groups should refer to this guidance at the planning making stage when developing design codes for small sites. Once a design code is adopted for a specific area, boroughs and other decision-makers are expected to use these as a basis for their decision making. Developers of small sites and their design teams should also refer to this guidance.

[1]Small sites are less than 0.25 hectares in size

1 About this document

1.1 What are small site design codes?

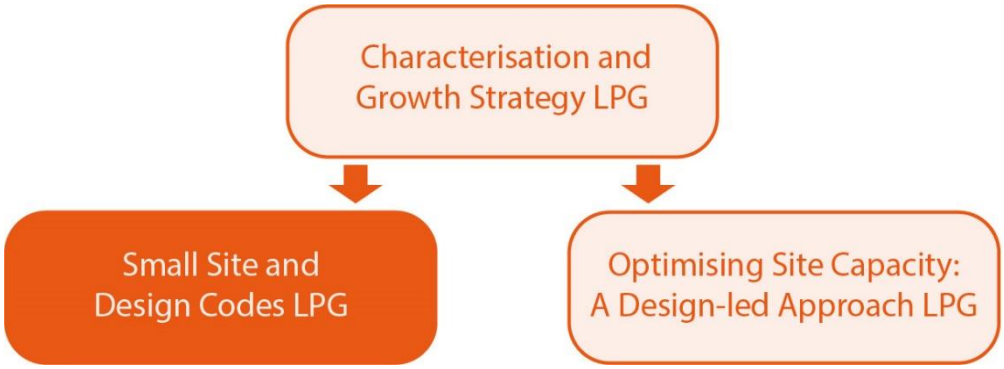
1.1.1 London Plan policy H2 requires boroughs to prepare design codes for small sites, where appropriate. These small site design codes are a particular type of design code that can be applied to a 'character type' (also called an 'area type' within the National Model Design Code) within a given area. These design codes should pro-actively support well-designed new homes on small sites by providing clarity and certainty over the design and quality of small site residential development. They are a key mechanism to delivering a borough's small sites housing target and an increase in housing through incremental housing developments.

1.1.2 **Small sites:** are residential developments on sites up to 0.25 hectares. Development on these sites may include new build; infill development on vacant or under-utilised sites; upward extensions of existing buildings (including non-residential developments); residential conversions, redevelopment and extension of existing sites.

1.1.3 **Design codes:** are a set of simple, concise, illustrated design requirements that are visual and numerical wherever possible to provide specific, detailed parameters for the physical development of a site or area.

1.1.4 This guidance only covers area-wide design codes for incremental intensification of small sites. Design coding for larger sites, such as site allocations, is detailed in the Optimising Site Capacity: A Design-led Approach LPG. Boroughs or neighbourhood planning groups may also choose to develop site-specific briefs or design codes for small sites where necessary but should refer to the guidance above when undertaking this.

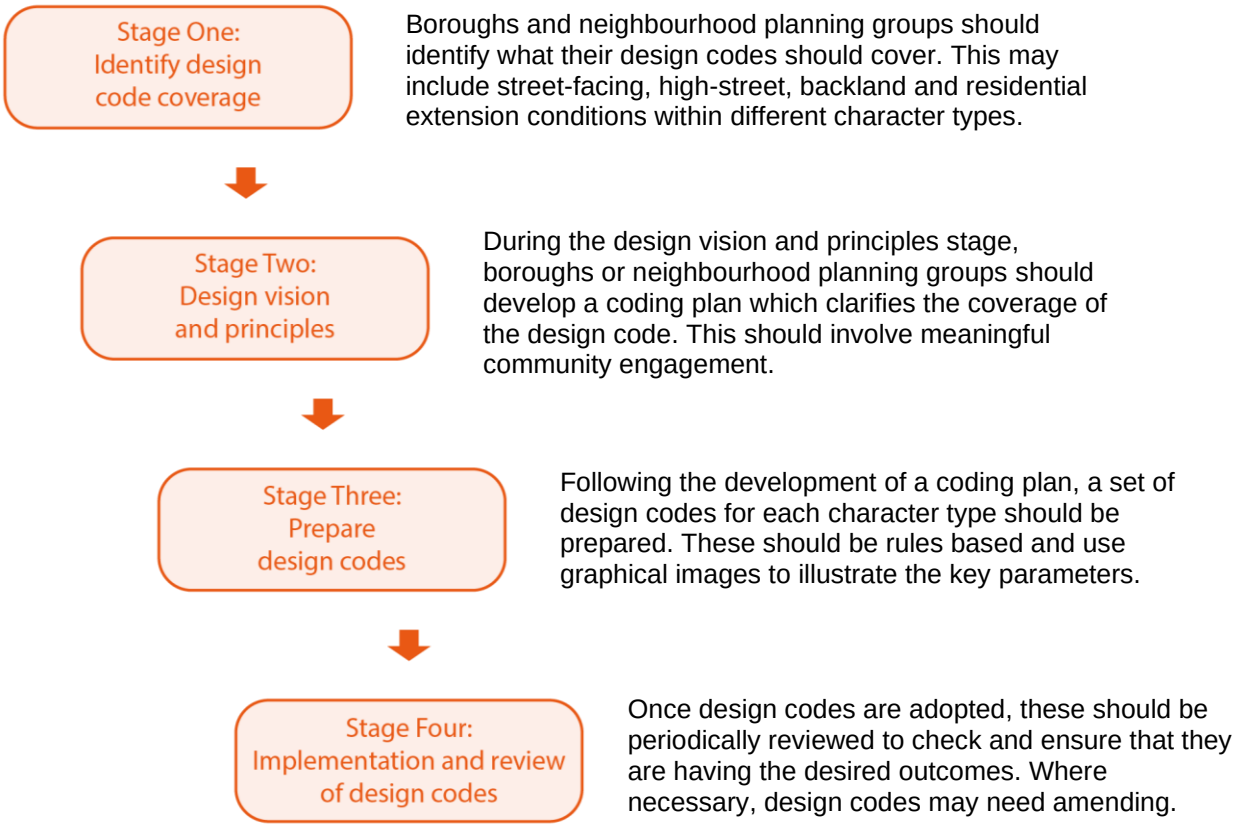
Figure 1.1 Relationship between the design LPGs



1.2 Stages in developing area-wide design codes

1.2.1 The development of area-wide design codes should be carried out using the following four stages. These stages aim to ensure that area-wide design codes reflect the character and identity of the area and potential for change as well as the views of all parts of the community. This document also provides four example design codes which illustrate how this guidance can be used. These example design codes are shown in Appendix 2.

Figure 1.2 Four stages to developing area-wide design codes



Neighbourhood planning

1.2.2 Neighbourhood planning groups are encouraged to develop area-wide design codes within their designated neighbourhood area. Where applicable, this will include the identification of specific small sites, development of a coding plan and design codes and the periodic review of these codes. Alternatively, neighbourhood planning groups may wish to collaborate on a borough's area-wide design codes and boroughs are required to collaborate effectively with any statutory neighbourhood planning bodies.

2 Stage One: Identify design code coverage

2.1 Identification of character types

2.1.1 Small site area-wide design codes should use identified 'character types' as a basis for the application of the design codes. The process of determining these character types should be carried out during a borough's characterisation assessment and is detailed in the Characterisation and Growth Strategy LPG.

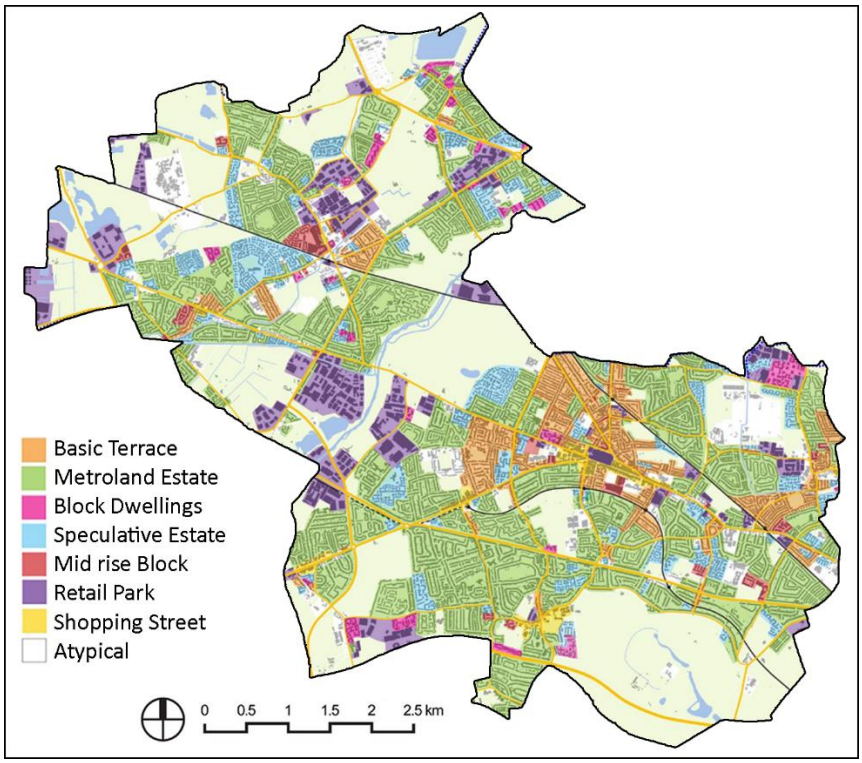
Excerpt from Characterisation and Growth Strategy LPG (Section 2.4)

Character types (also known as Area types): are the basic unit of characterisation and are the building types or typologies within an area. Types are generic, not geographically specific, and can occur in more than one location in the borough. These types should be identified through use of the London Historic Characterisation Thesaurus (LHCT) Examples include the *Basic Terrace* and *Metroland Estate* types.

While the term 'character type' is more commonly used in existing characterisation studies, the term 'area type' is used in the National Model Design Code. These two terms (character type and area type) can be used interchangeably within this document.

Each character type shares common features and characteristics such as their built form, typology and architectural form. Where appropriate, these types will also form the basis of a coding plan for a borough or neighbourhood-wide small site design code (see Small Site Design Codes LPG). Each of the identified character types should be analysed to identify it strengths, weaknesses, opportunities and threats.

Figure 2.1 Example map of character types



2.2 Forms of incremental housing development conditions

2.2.1 Boroughs and neighbourhood planning groups should choose to prioritise coding in areas for which the development of small sites is most likely to come forward. Incremental intensification of existing residential areas with higher connectivity - due to proximity to transport infrastructure or town centres - is expected to play an important role in the delivery of small site development. As such, boroughs and neighbourhood planning groups are advised to prioritise design coding for character types located in or near town centres with higher PTAL areas (3-6 in particular).

2.2.2 Figure 2.3 and Figure 2.4 show some common opportunities for incremental housing development within a terrace, linear block and semi-detached housing context. Each condition will create different requirements for design codes which are discussed in the following sections. Where applicable, it is recommended that for each character type prioritised to be coded for, that design codes for each of the following small site conditions are developed:

Street-facing conditions: site with direct access to the street.

High street conditions: site situated on or near a shopping street.

Backland conditions: site behind development, commonly underused rear land.

Residential extensions: extension of an existing development or dwelling to provide additional residential accommodation. This may be in the form of an upward, side or back extension.

Figure 2.2 Goldney Mews in Westminster is an example of a backland development.

Figure 2.3 Opportunities for incremental housing development within terraced and linear block context

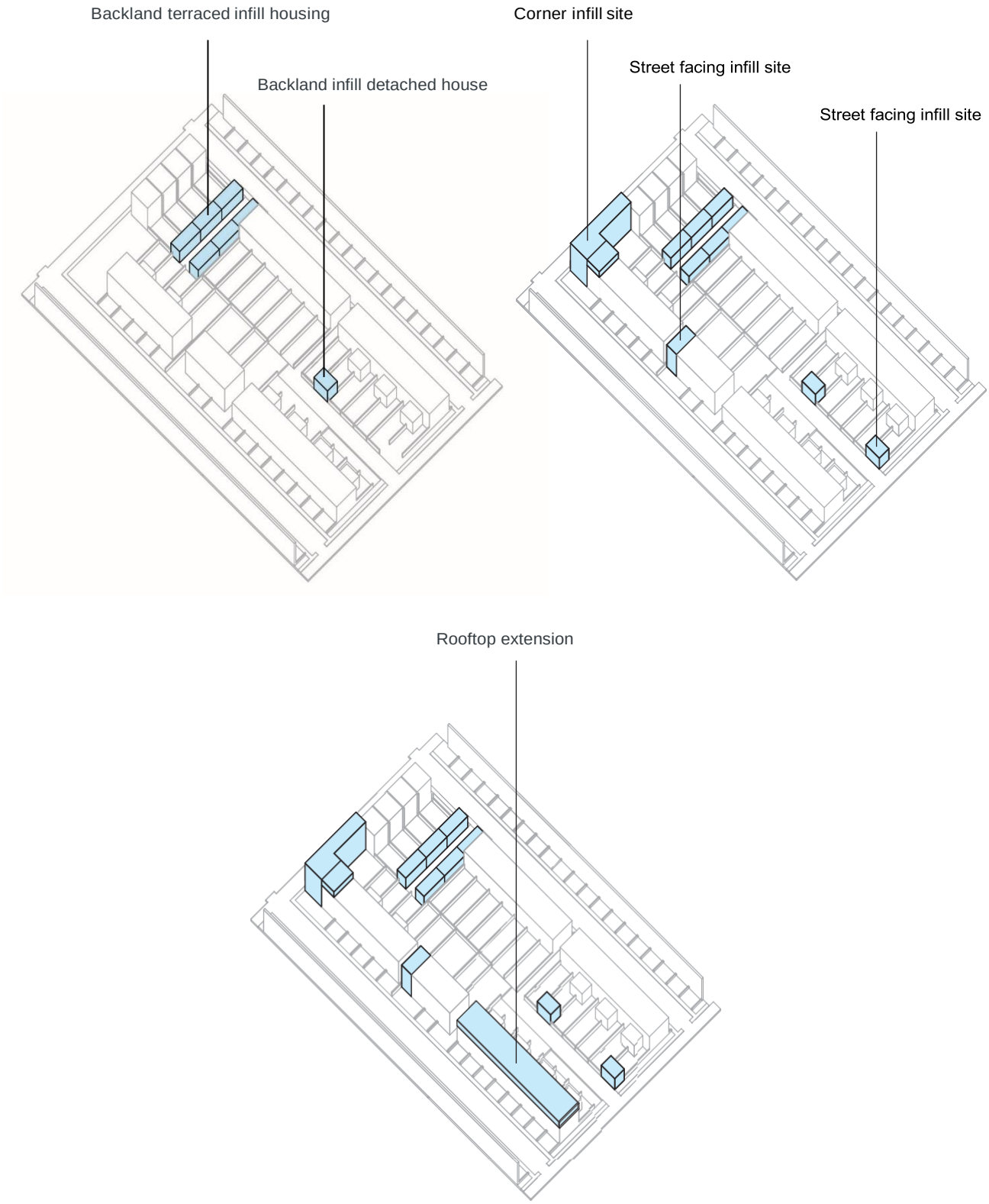
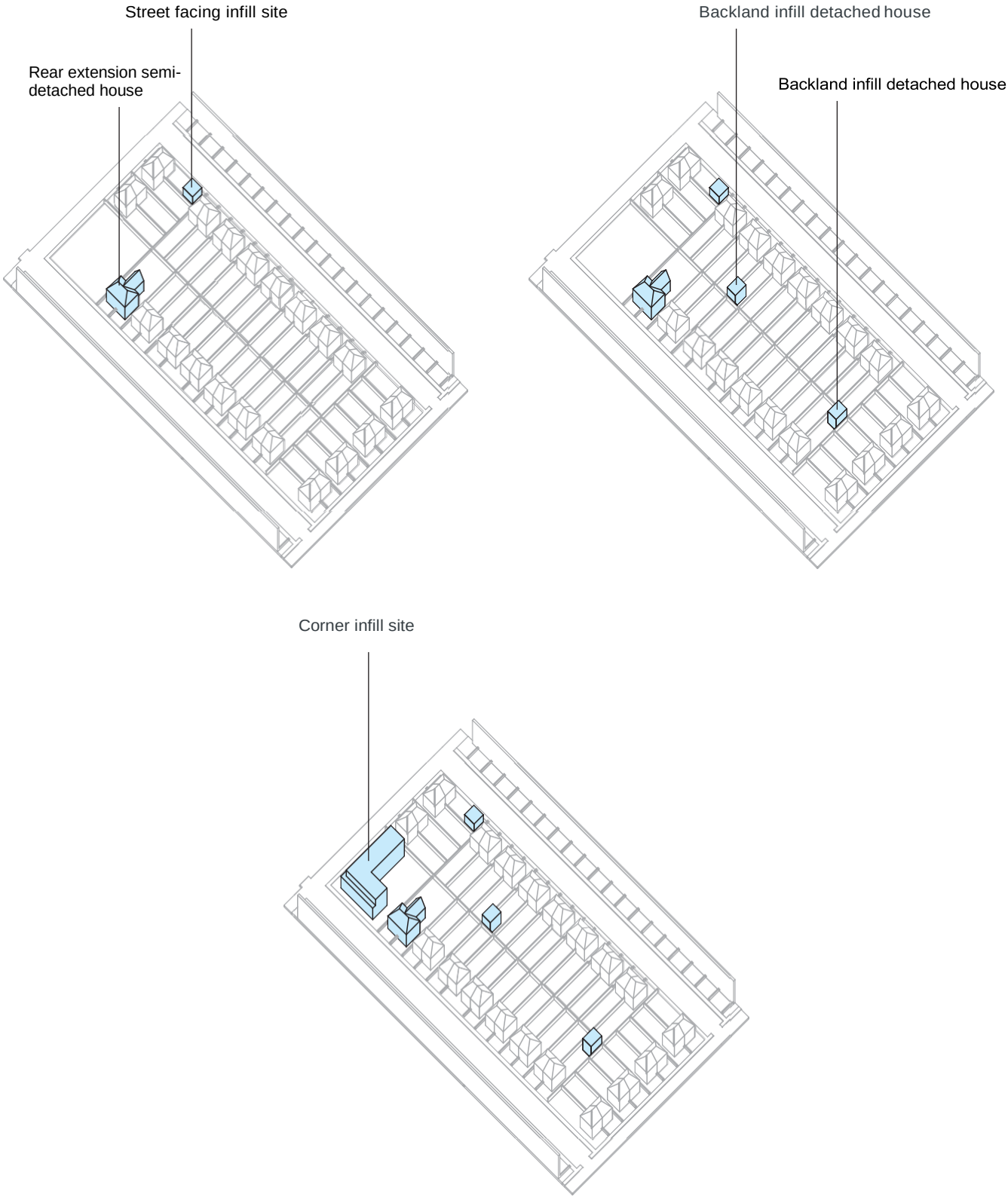


Figure 2.4 Opportunities for incremental housing development within semi-detached contexts



2.3 Street-facing conditions

Residential street infill

2.3.1 Residential street infill sites are plots situated on residential streets that have a street facing aspect. These include infill sites in the middle or end of a residential street and can include underutilised car parking spaces and gaps in the streetscape. On a street-facing plot, the character of the existing street scene will closely inform the relationship between the proposed development and the existing surrounding buildings. This character will inform the design codes on the frontage line, front-to-front distances, building heights, rear projections and roof forms.

Source: Google Street View

Figure 2.5: Street-facing infill

These sites have direct access to the street and are often framed by two adjacent buildings. However, they may also be located at the end of a street, as shown in the image to the left.

Source: Google Street View

Figure 2.6: Corner infill

Corner infill sites have direct access to the street and are most likely at road junctions. These corner sites often offer an opportunity to increase the height of development in relation to its surroundings and act as marker buildings.

2.4 High street conditions

High street infill sites

2.4.1 High Street sites are plots situated on or near high streets throughout London that do not optimise their site capacity or contribute positively to the streetscape. Appropriate design codes for these sites may permit upward extension or demolition and rebuild depending on the built quality of the site. Important design code parameters for this type of site include building height, frontage line, roof form, materiality, entrance arrangements and ground floor use class among others.

Figure 2.7 High street infill

This London high street, with a break in its three-storey frontage, offers the opportunity for redevelopment. Infill of such sites should continue to provide an active mixed-use ground floor where possible and reinforce the high street's strong frontage line with dwellings on the upper floors.

Figure 2.8: Surface carparks

Coupled with improved active travel measures, town centres and high streets should look to optimise underutilised surface carparks. These sites offer scope to redevelop as residential developments providing additional housing.

2.5 Backland conditions

Sites that do not have a street frontage

2.5.1 Backland sites are sites that do not have a street frontage or where direct access to the street is limited. Among others, they include residential garages that are located behind development and estate infill in areas that are not street-facing. These sites offer the opportunity to provide additional housing and improved public realm. While developments in street-facing conditions are generally governed by a clearer set of rules established by the urban order of an existing streetscape, backland sites require more innovation and reinterpretation to enable development. Consideration of access and servicing and the inter-relationship between overlooking, privacy and daylight/sunlight is paramount to the success and acceptability of new development in backland locations.

Source: Google Street View

Figure 2.9: Residential garages and back gardens

Residential garages should be prioritised for residential redevelopment. Development of these sites can reinstate the streetscape, reduce flood risk and encourage active travel. Underutilised back gardens also provide an opportunity for additional homes. However, development of these sites should not cause a net loss of green cover (see paragraph 4.1.14).


Source: Google Street View

Figure 2.10: Estate infill

Estate infill sites can offer the opportunity to reinstate street frontages by providing a frontage line in locations where this has been lost. Much of this space is often where direct access to the street is limited. Redevelopment of such sites are expected to include wider improvements to the estate, such as communal areas, open spaces and access and should not lead to a loss in green space.

2.6 Residential extensions

Upward, side and rear extensions

2.6.1 Sites suitable for upward, side and rear extensions include residential dwellings and housing blocks. A design code for this type of small site may be appropriate for a street or number of streets so to ensure consistency within an area. While a modest uplift on its own, the contribution of upward, side and rear extensions can be significant if done across a neighbourhood. A design code that is applicable to a number of streets is intended to contribute positively to the streetscape by encouraging an element of symmetry and pattern. It can also prevent situations where upward or side extensions are designed differently through the same street which can negatively impact the streetscape. Applying a design code to a row of dwellings can also encourage a higher take up of the design code.

Source: Google Street View

Figure 2.11: Dwelling upward extension

A common example of an upward extension is a roof extension. Design codes for these must consider the implications if take up is low and its impact on the streetscape. Permission to extend also provide the opportunity to attach planning conditions to refurbish the façade and the reinstatement of original architectural features that may have been lost since first built.

Source: Google Street View

Figure 2.12: Linear and villa block extension

Often under one ownership, upward extensions of linear and villa blocks can avoid some of the complications that terraced or semi-detached dwelling extensions may experience. Permission to extend provides the opportunity to attach conditions to improve the existing façade and amenity space. Regardless of PD rights, boroughs are encouraged to set out design best practice.

2.7 Identify and map small sites for development

2.7.1 It may be appropriate and advantageous to identify and map certain small sites for development. This is likely to be particularly appropriate for larger sites (those closer to 0.25 hectares in size) but it may also be relevant for a wider range of small sites, given the nature of the built-up area in London. Appropriate small sites may also be those that would have a significant positive impact on the character of the area if they were to be redeveloped. Examples could include vacant land, residential garages or underutilised carparks/surface parking.

2.7.2 An area-wide design code will apply to these identified sites to encourage future development of these sites. Identified small sites should be listed and publicly accessible via a borough's online Brownfield Register. Boroughs and neighbourhood planning groups are encouraged to include these on online maps, as illustrated in Figure 2.13. This will allow maps to be kept 'live' and updated when sites are developed out. Digital mapping of identified sites also allows an opportunity to overlay this information with other data sources like below ground utilities. For some small sites, it may be advantageous to a develop a site-specific design code. Boroughs and neighbourhood planning groups should refer to the Optimising Site Capacity: A Design-led Approach LPG for details on this process. In a limited number of circumstances, they may also wish to allocate some of these sites.

Figure 2.13 Screenshot of Newham's brownfield sites near Plaistow (Image source: London Planning Datamap)

2.8 Coding coverage

2.8.1 At the end of this stage, boroughs and neighbourhood planning groups should have identified and determined the coverage of their design codes. This should include a number of ‘character types’ where the area-wide design codes will apply and any specifically identified small sites that are appropriate for development. At this stage, boroughs and neighbourhood planning groups should also consider whether it may be advantageous for the same character type to have varying design responses. For instance, it may be necessary for character types that have a large variation in location, connectivity and architectural detailing (such as a different roof line) to have different design responses.

3 Stage Two: Design vision and principles

3.1 Character and context

3.1.1 Area-wide design codes should be grounded on a vision and set of design principles for each area that is being coded for. This should clearly articulate the type of small site development that is likely to be appropriate. An area-based vision should also reflect and link back to the findings of a borough's characterisation work that identified the strengths and weakness of each character type (see Characterisation and Growth Strategy LPG).

3.1.2 This vision should aim to build on the opportunities, strengths and weaknesses of each character type which in turn will inform the design aspirations and visions and how best to contribute to the positive aspects of local character. The design vision should also consider that the same design code may be applied to character types in areas of differing levels of accessibility and therefore account for this.

3.2 Public engagement and consultation

3.2.1 Fundamental to the process of developing effective and well-designed codes is the involvement of a range of stakeholders from the outset. This includes residents, community groups and local businesses as well as development professionals. Boroughs and neighbourhood planning groups should undertake this meaningful community engagement to determine the potential coverage of a design code to ensure that the codes reflect the views and aspirations of Londoners living in the neighbourhoods likely to be affected by and benefit from change. This engagement should be inclusive and reflect the range of view across the community in accordance with Good Growth Objective 1 of the London Plan. Engaging the public at this early stage aims to bring forward discussions about the future vision before planning applications under any new codes are submitted. To assist in this process, a range of in-person and digital engagement tools can be utilised. See the National Model Design Code for more information on public engagement when preparing design codes.

What public consultation and engagement should cover

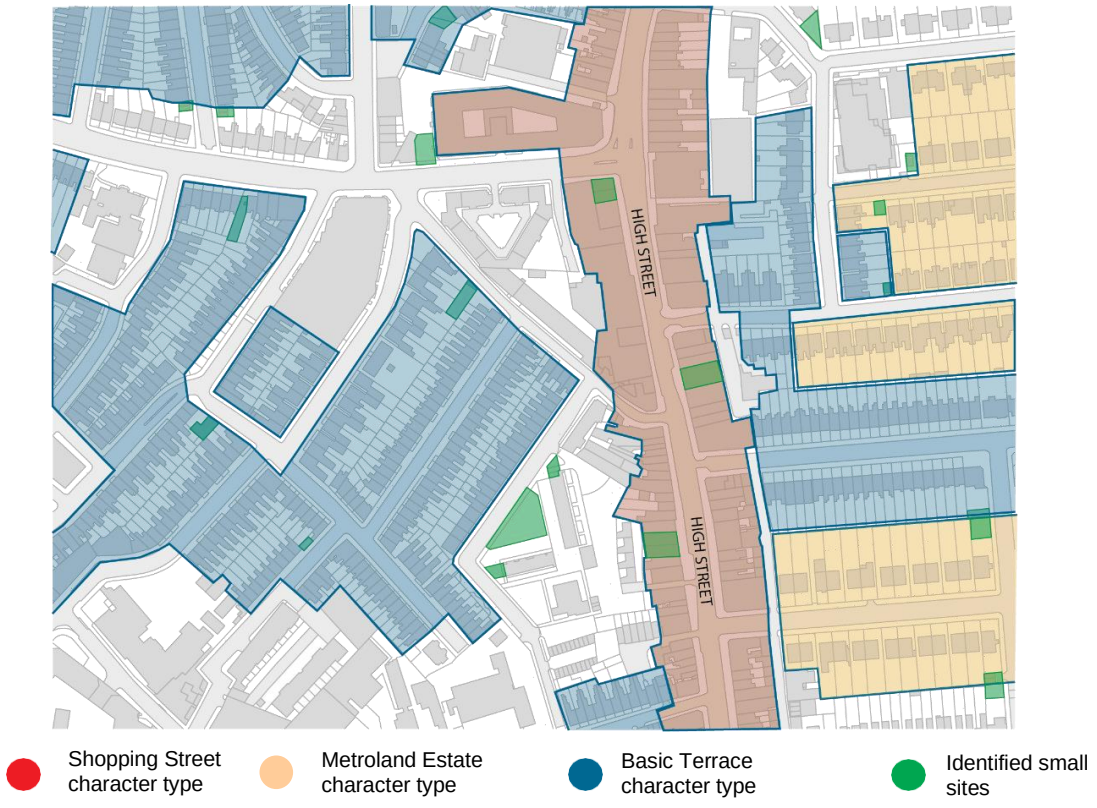
- application of design code and how it influences individual schemes
- identification of the areas where the code will apply
- content of the design code

3.3 Small sites coding plan

3.3.1 Boroughs and neighbourhood planning groups should develop a coding plan which identifies the different character types being design coded for and as such where the design codes will apply. Each character type should have a different design code which responses to the unique characteristics of each type. For instance, a design code (such as a set of illustrations and rules) for a *Basic Terrace* character type will be different than that of a *Metroland Estate*.

3.3.2 **Coding plan:** is the map of the local authority or neighbourhood area that identifies where the design codes will apply. This map is likely to be very similar to a character types map. However, it may exclude areas of very mixed character and those near the boundary with other character types where coding would be difficult to achieve. A coding plan should be in the format of a digital map so that it can be updated periodically and accessible to the public. It should also show any identified small sites.

Figure 3.1 Example coding plan for a part of a borough



3.3.3 Figure 3.1 shows part of a coding plan (shown in blue, red and yellow) and identified small sites (shown in green). A design code should then be devised for each character type identified within the coding plan. This code will then guide what is acceptable within that area. This format allows for easy identification for the different character types and the subsequent design codes that are applicable.

4 Stage Three: Prepare design codes

4.1 Design code content

4.1.1 Design codes should be rules based and use graphical images to illustrate the key design parameters. This may include examples of best practice as well as what is not acceptable in design terms. Design codes are encouraged to use the terms ‘must’, ‘should’ and ‘could’ to clarify the level of compliance needed to conform with a design code. This approach aims to define the elements that are non-negotiable while leaving flexibility in other elements.

4.1.2 Where compliance is mandatory, the word 'must' should be used. Where compliance is expected, the word 'should' should be used. For design codes elements that are listed as 'should', applicants can deviate if they can justify a positive reason for doing so and that high-quality design will still be delivered. Boroughs and neighbourhood planning groups may also want to use the term ‘could’ when compliance is optional and if up to the discretion of the applicant.

4.1.3 When preparing a design code, judgement should be used about the level of prescription contained within codes to ensure design principles lead to a context-based response, without limiting the innovation necessary to successfully realise good design and optimise the capacity of sites. The coverage of design codes will vary across character types and the type of small site condition that is being coded for. A comprehensive list is included within the NMDC and shown in Appendix 1 which can be used when deciding what elements should be included in a design code. The following section will outline several of the most common elements.

Code testing

4.1.4 The testing of design codes is an important aspect to the preparation of design codes. Workshops should be held with a range of stakeholders to trial and use the design codes being prepared. This provides an opportunity to test a code and consider any unintended consequences that could arise including a failure to optimise the capacity of sites. This exercise should identify aspects of a code where amendments are necessary. Coding should also take into consideration permitted development rights as a fall-back option and should avoid coding which incentivises poorer design solutions which do not require planning permission.

Boundary conditions

4.1.5 At the boundary of two different character types, it is important to consider the implication of an area’s design code on its neighbouring area. As a result, it may be necessary to exclude some boundaries from a coding plan.

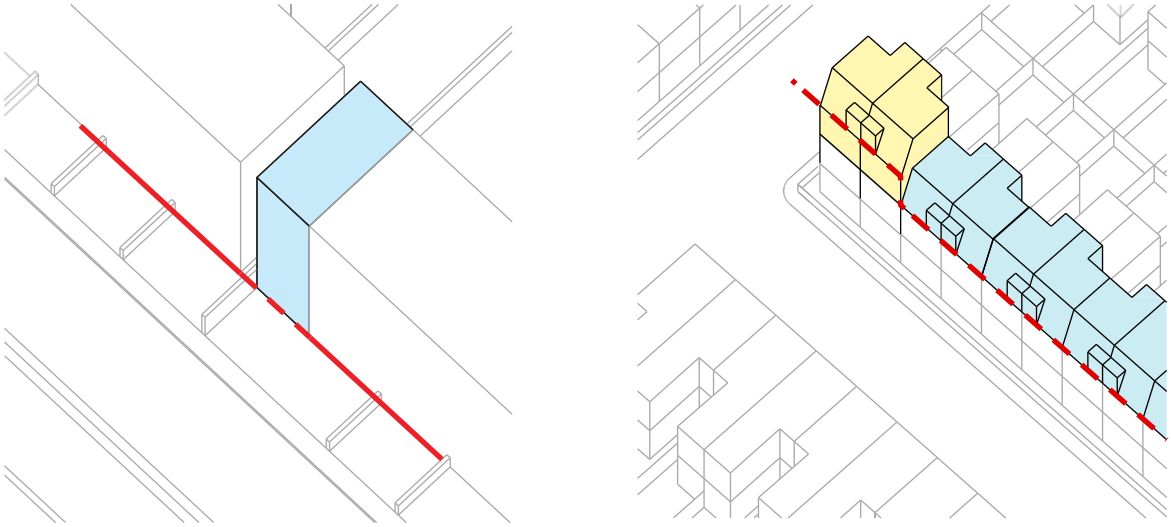
Front building line

4.1.6 Most design codes are likely to code for the front building lines (frontage) of any new development that faces the street. Most commonly, these codes are likely to advocate consistency with the existing building line of the street within which it is located. Typically, terraced housing has a regular, unbroken building line and it is likely that most design codes for these character types will require development to align with the existing building line so to not negatively impact the character of the street.

4.1.7 Character types of semi-detached and detached houses may have more variation in their building line, allowing flexibility in the positioning of new development in relation to the street. However, any design codes for these areas should ensure that the building line of new development should not negatively impact the street scene or harm either the privacy or the daylight and sunlight enjoyed by occupiers of existing nearby dwellings. Nor should it create or exacerbate street canyons in areas of existing poor air quality. The code should identify whether incremental development that bookend a street, or are located on a corner site, may have the opportunity to accommodate additional depth due to their potential to have multiple aspects and a prominent position. In these locations, a building line that steps out in relation to adjacent buildings could be considered appropriate, but care should be taken not to interfere with circulation and the public realm.

4.1.8 In town centre and high street contexts with mixed-use ground floors, building frontage lines often have a direct relationship with the pavement and do not include space directly in front of the property that is owned and maintained by an identifiable household. In these circumstances and character types, consideration should be given to upper-level balconies, which may need to be inset in order to avoid overhanging the pavement.

Figure 4.1 Building line



Front-to-front and back-to-back distances

4.1.9 When developing design codes for new streets and backland development, design coding the front-to-front and back-to-back distances can be useful to provide clarity for new development. Enclosure ratios/building height to street width ratios can also be used where new streets are envisioned. It may also be advantageous to identify street typologies when setting design codes as these can provide clarity on the height and width of buildings and streets respectively.

Figure 4.2 Example illustrations of frontage distances and building setback

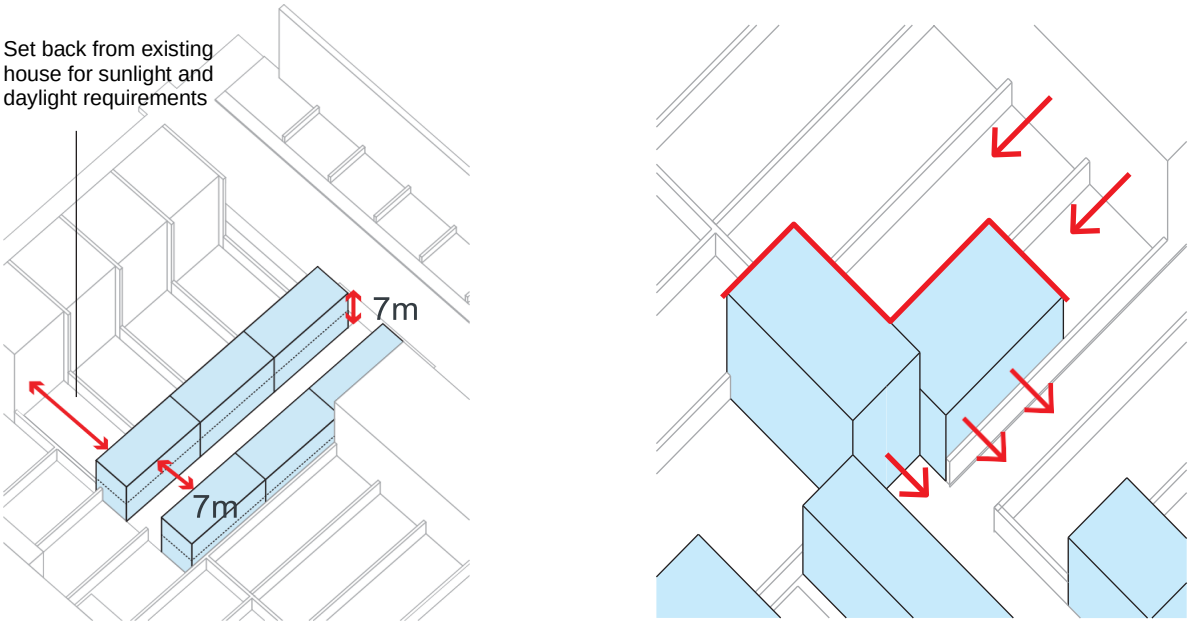


Figure 4.3 Dujardin Mews in Enfield has a building height to street width ratio of 1 which creates an appropriate level of enclosure for this location

Building height

4.1.10 Building height is one of the key design coding elements. It can influence the character of a place, its identity and the environment for occupiers and users. Design codes may also be used to encourage increases in height particularly where this would optimise sites with good accessibility. For instance, new development may seek to accommodate one or more additional storeys. To ensure that the character and scale of the buildings along a street is maintained, design codes can include requirements to set back the top floor or advocate that upward extensions be partially contained within the roof space. In all circumstances, it is critical to ensure that existing and surrounding properties continue to receive good levels of daylight and sunlight and that the streetscape is positively enhanced.

Figure 4.4 Example illustration of the building heights in a semi-detached character type (such as Metroland Estate)

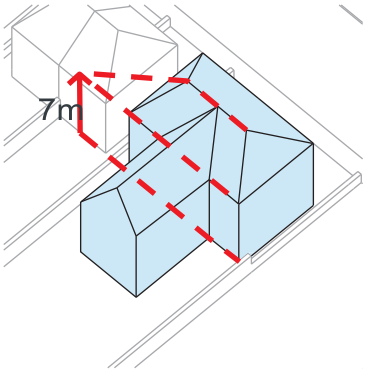


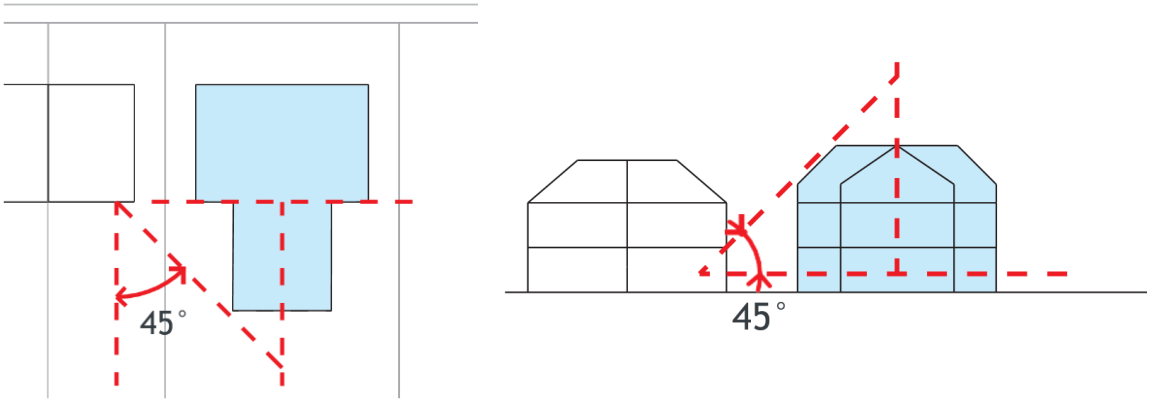
Figure 4.5 Otts Yard in Islington is a good example of a backland development that avoids an unreasonable impact on the daylight and sunlight enjoyed by existing homes

Rear building line projection

4.1.11 When setting design codes for buildings or extensions that extend beyond a rear building line, parameters should be set to ensure that there is no unreasonable impact on the amenity of neighbouring homes in relation to daylight, sunlight and privacy.

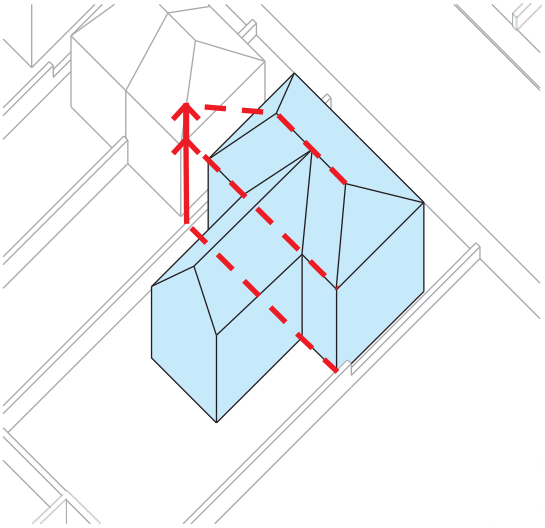
4.1.12 A good rule of thumb is to follow the 45-degree rule illustrated below. This rule specifies that the height and depth of a new development or extension should not breach a 45-degree line drawn from the centre of the window of the lowest, and closest, habitable room on the neighbouring property.

Figure 4.6 Example code for rear building line projection of dwellings in a semi-detached character type (such as Metroland Estate)



4.1.13 Design codes can also use rear projection lines to set parameters on the height of new developments or extensions. These can ensure that new development is not overly dominant and access to daylight and sunlight of the habitable rooms of neighbouring homes is maintained.

Figure 4.7 Rear building line projection in a semi-detached character type (such as Metroland Estate)



Green cover and landscaping

4.1.14 There are multiple ways that design codes can code for green cover and landscaping. This can be done for instance through requiring street trees, green roofs and other greening measures such as sustainable drainage systems. Design codes should aim to prioritise the retention and provision of green features that have the most benefits. These should be used to secure net biodiversity gain and no net loss of green cover on minor development. In addition, the Urban Greening Factor (see Policy G5 Urban Greening) will apply to all major developments (10 units and above) and boroughs and neighbourhood planning groups are encouraged include this requirement as part of their design codes. Below is an example showing how a site can work out the reprovision of green cover so that no net loss of green space is secured.

Figure 4.8 **Example of providing green cover and landscaping**

Existing site

The existing site is a backland site with residential garages. It is accessible via a side road and has two areas of green coverage that will need to be re-provided.

The site also includes the full canopy of a tree. This will also need to be replaced.

Green coverage of the site

Green area to replace:

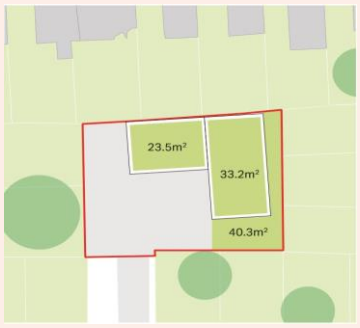
Tree		17m²
Area 1	+	53.8m²
Area 2	+	9.7m²
		80.5m²

Proposal A

The tree is removed and green coverage is replaced in the form of two green roofs and a garden.

Green area to replace

Green roof 1	23.5m²
Green roof 2	33.2m²
Garden	40.3m²
	97m²



Proposal B

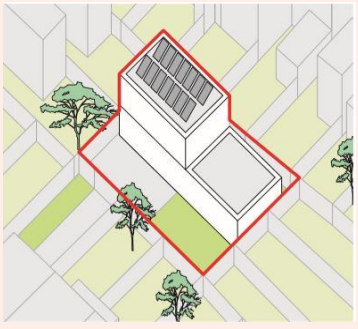
The tree is retained and additional green coverage is added.

Green area to replace

Area	9.7m²
Gardens	74.8m²
	86.2m²

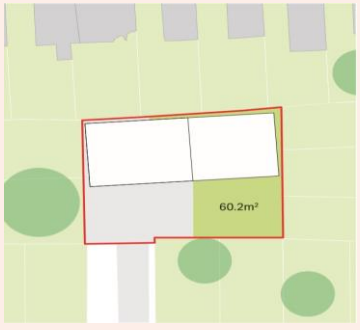
Proposal C

The tree is removed and no additional green space is provided. More green cover should be provided (for instance by adding green roofs).



Green area to replace

Garden	60.2m²
	60.2m²



Block types and building forms

4.1.15 When setting design codes for different character types, codes may set design parameters on the building type and typology of new development. This can help ensure that the block size of new development positively contributes towards the character of an area and facilitate a transition to a higher density over time. This can be done through setting design codes on the type and typology of urban block as well as the urban gain, plot ratio and floor area ratio (FAR).

Figure 4.9 Examples of different urban grain (Image source: National Model Design Code)

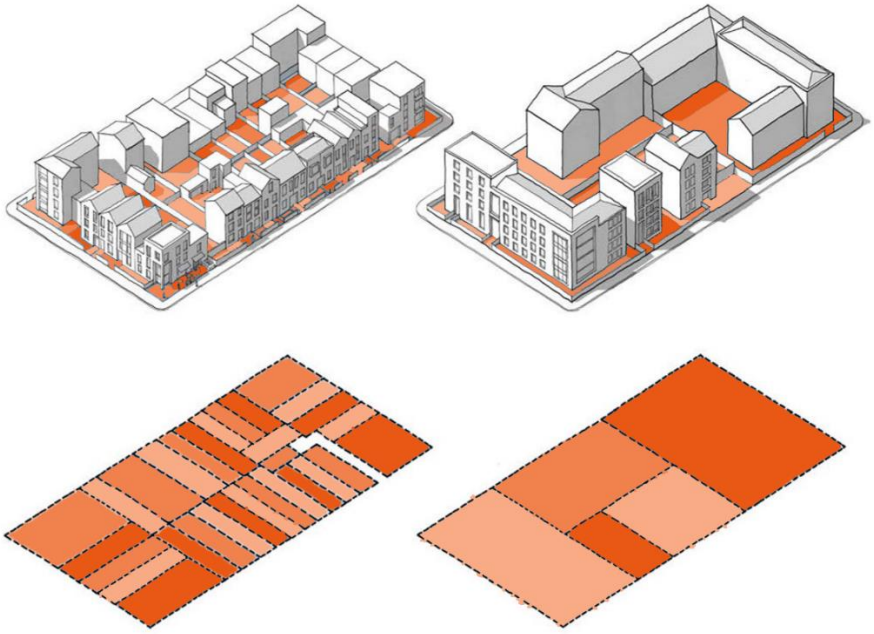
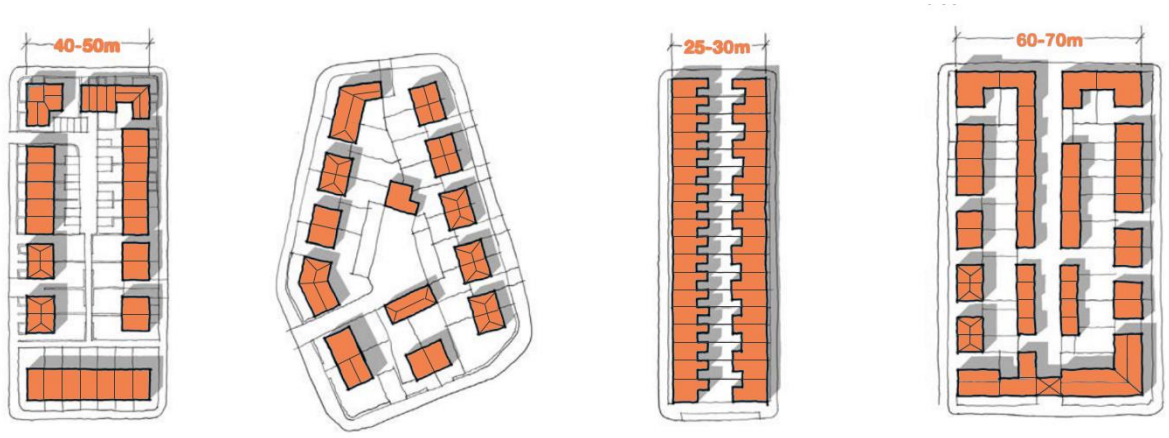


Figure 4.10 Examples of different block types (Image source: National Model Design Code)



Perimeter block **Informal block** **Terrace** **Mews block**

Roof form and windows

4.1.16 The building roof form and window dimensions are important design coding elements for small site development. Clarifying the appropriate (and sometimes inappropriate) design of these elements through a design code can be a useful tool to improve design quality and the impact of new development on the local streetscape. This is particularly the case for infill development coming forward in character types that have a strong and consistent built form.

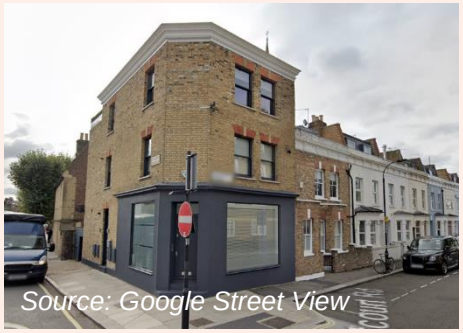
4.1.17 Innovative use of roof space and form will also be key to the success of small backland developments. Adopting a lower roof height and profile can help lessen the impact on neighbouring development by reducing overshadowing and maintaining privacy.

4.1.18 Design codes for upward extensions may require particular focus on the roof form and windows. This may include parameters on appropriate roof types such as gable, hipped and mansard. Design codes may also provide clarity on the required spacing of windows which can be important in contributing to a consistent approach along a street.

4.1.19 Boroughs and neighbourhood planning groups should consider the implications if take-up of a design code is low. In these situations of low take-up, a streetscape may be negatively impacted by noticeable gaps in the roofline. For this reason, a design code should be designed in a way to minimises the impact when and if the take-up is low.

Figure 4.11 Design precedents are a useful way to illustrate appropriate and inappropriate design or application of code

Appropriate roof extensions



Setting back the top floor can be a useful way to minimise the impact and appearance on the streetscape. Corner plots have the potential for an increase in height.

Inappropriate roof forms and windows

A common approach to window spacing and roof type is important to ensure consistency along a street. An inconsistent approach can contribute to an unbalanced sense of proportions and streetscape

Materiality and detailing

4.1.20 When design coding for materials, it may be appropriate to provide a range of options that developments can choose from. This could be in the form a matrix which clarifies which materials are permitted or recommended (shown in Figure 4.12).

Figure 4.12 Example building material matrix[2]

All buildings **must** be made from well-detailed robust materials that are durable, age well and are positively enhanced by weathering. New development **should** be clad in the following predominant materials using accent materials where appropriate. Additional and alternative materials **could** be appropriate and will be considered on their merits.

Predominant materials	 Brown clay facing brick	 Buff clay facing brick	 Red clay facing brick
	 Dark Grey clay facing brick	 Reconstituted slate tile	 Concrete plain roof tile
Accent materials	 White clay facing brick	 Metal railings	 Perforated steel guarding
Examples of how to use materials	 Brick detailing adds texture and interest	 Full brick window reveals give a sense of depth	 Street Metal accent used for cycle and bin storage

[2] This building material matrix has been inspired by the Wing Design Code

5 Stage Four: Implementation and review of design codes

5.1 Monitoring of design codes

5.1.1 Once adopted, a borough or neighbourhood planning groups' coding plan and design codes should be made publicly available. Boroughs and neighbourhood planning groups are encouraged to display these on interactive web-based maps which link the relevant design codes to each area of the coding plan. Four example design codes are shown in Appendix 2.

5.1.2 Design codes should be periodically reviewed, and their effectiveness assessed, as part of the development plan monitoring and evaluation process. It is likely that elements of a design code may have to be subsequently amended to reflect any issues or learning that has arisen since adoption.

5.2 Design code enforcement and compliance

5.2.1 The planning authority should monitor the compliance of their codes and are encouraged to develop a compliance tracker for each of their design codes. These can be useful when assessing the compliance of a design code as well as help to enforce it. These trackers or checklists can include a tick box approach where the different design coding elements are monitored.

Appendix 1 National Model Design Code elements

Figure A1.1 Design code coverage (Source: National Model Design Code)

If the design code covers...		URBAN EXTN.	INFILL SITE	SMALL SITES
Context				
C.1.i	Character Types	✲	✲	✲
C.1.ii	Site Context	✲	✲	✲
C.1.iii	Site Assessment	✲	✲	✲
C.2.i	Historic Assessment	✲	✲	✲
C.2.ii	Heritage Assets	✲	✲	✲
Movement				
M.1.i	Street Network	✲	✲	✲
M.1.ii	Public Transport	✲	✲	✲
M.1.iii	Street Hierarchy	✲	✲	✲
M.2.i	Walking + Cycling	✲	✲	✲
M.2.ii	Junction+Crossings	✲	✲	✲
M.2.iii	Inclusive Streets	✲	✲	✲
M.3.i	Car Parking	✲	✲	✲
M.3.ii	Cycle Parking	✲	✲	✲
M.3.iii	Services + Utilities	✲	✲	✲
Nature				
N.1.i	Network of Spaces	✲	✲	✲
N.1.ii	OS Provision	✲	✲	✲
N.1.iii	Design	✲	✲	✲
N.2.i	Working with Water	✲	✲	✲
N.2.ii	SUDS	✲	✲	✲
N.2.iii	Flood Risk	✲	✲	✲
N.3.i	Net Gain	✲	✲	✲
N.3.ii	Biodiversity	✲	✲	✲
N.3.iii	Street Trees	✲	✲	✲

If the design code covers...		URBAN EXTN.	INFILL SITE	SMALL SITES
Built Form				
B.1.i	Density	✲	✲	✲
B.1.ii	Party Wall	✲	✲	✲
B.1.iii	Types and Forms	✲	✲	✲
B.2.i	Blocks	✲	✲	✲
B.2.ii	Building Line	✲	✲	✲
B.2.iii	Height	✲	✲	✲
Identity				
I.1.i	Local Character	✲	✲	✲
I.1.ii	Legibility	✲	✲	✲
I.1.iii	Masterplanning	✲	✲	✲
I.2.i	Design of buildings	✲	✲	✲
Public Space				
P.1.i	Primary	✲	✲	✲
P.1.ii	Local+Secondary	✲	✲	✲
P.1.iii	Tertiary	✲	✲	✲
P.2.i	Meeting Places	✲	✲	✲
P.2.ii	Multi-functional	✲	✲	✲
P.2.iii	Home Zones	✲	✲	✲
P.3.i	Secured by Design	✲	✲	✲
P.3.ii	Counter Terrorism	✲	✲	✲
Uses				
U.1.i	Efficient Land Use	+	+	+
U.1.ii	Mix	✲	✲	+
U.1.iii	Active Frontage	✲	✲	✲
U.2.i	Housing for All	+	+	+

If the design code covers...		URBAN EXTN.	INFILL SITE	SMALL SITES
U.2.ii	Type	+	+	+
U.3.i	Schools	✲	+	+
U.3.ii	Community Facilities	✲	+	+
U.3.iii	Local Services	✲	+	+
Homes and Buildings				
H.1.i	Space Standards	+	+	+
H.1.ii	Accessibility	+	+	+
H.2.i	Light, Aspect, Priv.	+	+	+
H.2.ii	Security	+	+	+
H.2.iii	Gardens+Balconies	+	+	+
Resources				
R.1.i	Energy Hierarchy	+	+	+
R.1.ii	Energy Efficiency	+	+	+
R.1.iii	N'hood Energy	+	+	+
R.2.i	Embodied Energy	+	+	+
R.2.ii	Construction	+	+	+
R.2.iii	MMC	+	+	+
R.2.iv	Water	+	+	+
Lifespan				
L.1.i	Management Plan	+	+	+
L.1.ii	Participation	+	+	+
L.1.iii	Community	+	+	+

✲ Issues that you would expect to be covered in a code

\+ Issues that may be covered elsewhere and so not included in the code

Appendix 2 Example design codes

A2.1.1 This section presents four example design codes for street-facing, high-street, backland and residential extension conditions. Each design code is preceded by an example analysis describing the characteristics of a selected character type and an illustrated demonstration of how key design principles within the scenario may be applied.

A2.1.2 These example design codes are solely illustrative and have been included to highlight a number of design coding tools and language that can be used. These codes do not include all design coding elements that may be necessary, and boroughs and neighbourhood planning groups should develop their own small sites design codes for the relevant character types and site conditions identified. Three exemplar case studies to each small site condition have also been provided, which illustrate a potential design solution.

A2.1 Street-facing example design code

Character type description and analysis

Character type: Basic Terrace

Typical site conditions: This code applies to street facing plots such as garage plots or other end of terrace sites.

Figure A2.1 Typical street-facing condition this code applies to

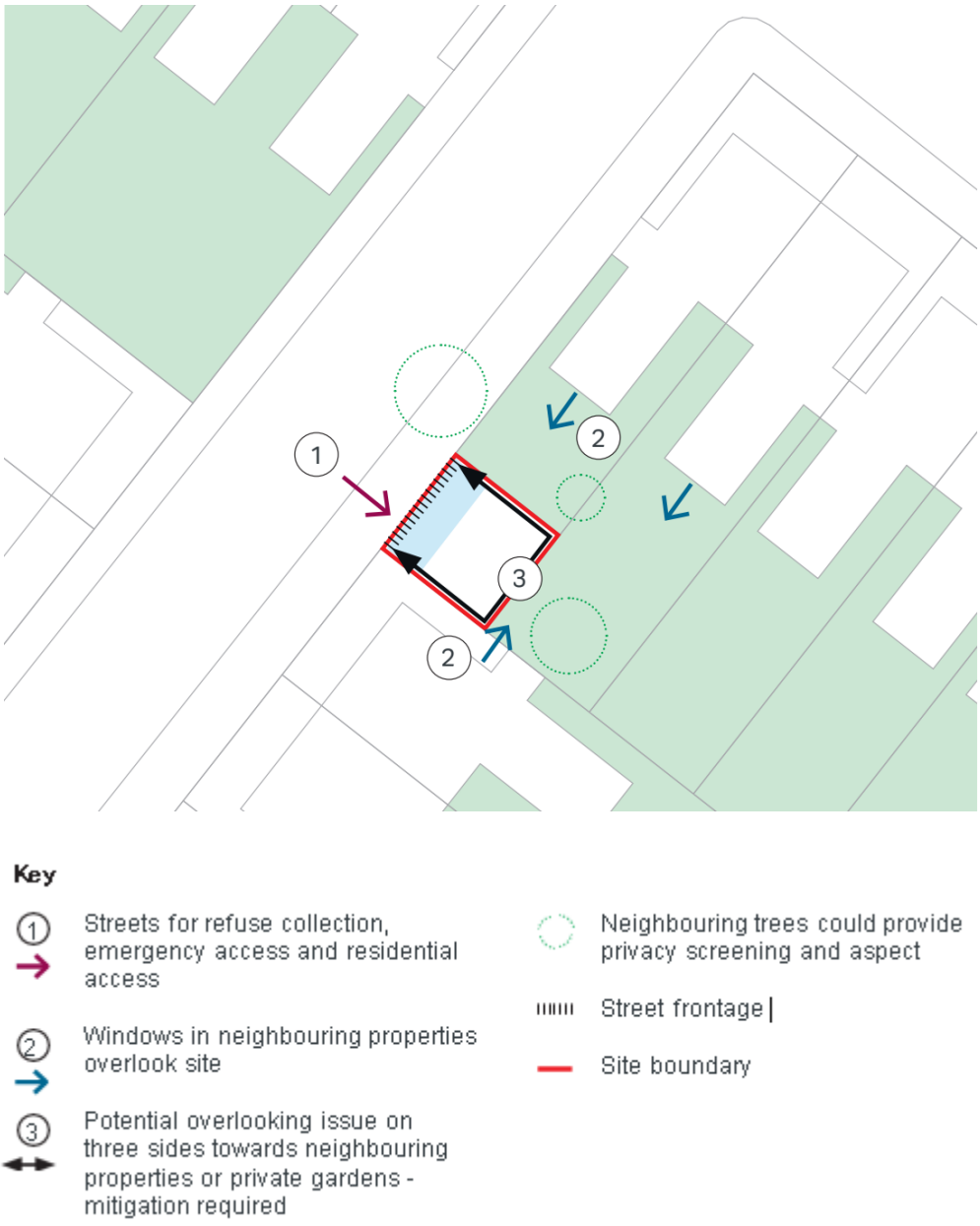


Figure A2.2 Aerial of example street-facing site

Figure A2.3 Potential street-facing sites that this code could apply to

A2.1.2 The following page shows an illustration of what an example design code for this small site condition could cover.

Figure A2.4 Frontage line

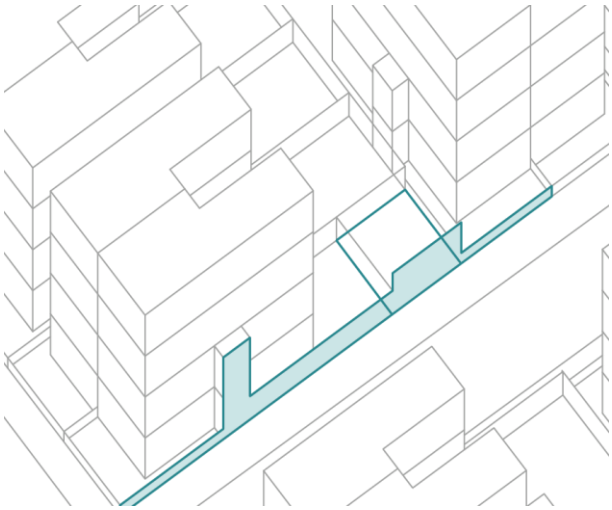


Figure A2.5 Built massing and height

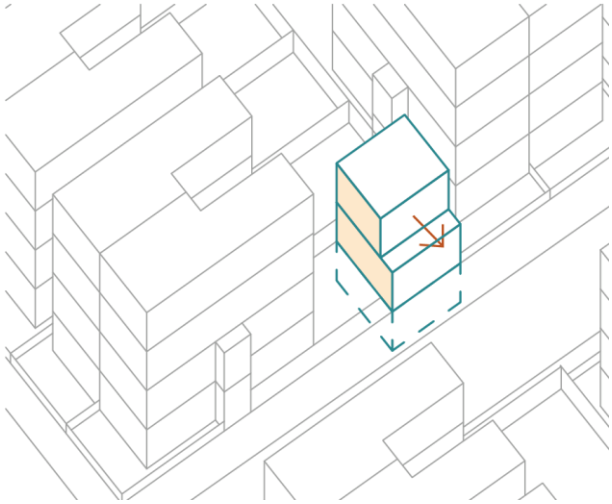
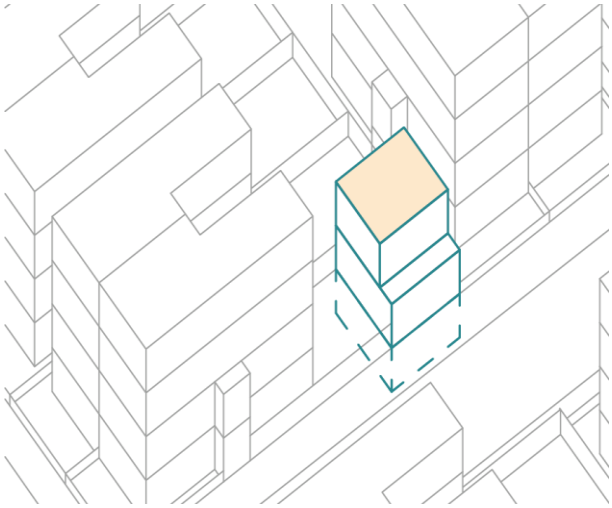


Figure A2.6 Green coverage



Frontage line

New development **must** be in line with the frontage building line of neighbouring properties.

Street facing frontages **must** avoid large areas of blank facades.

New development **must** retain sufficient private amenity for residents of the host building.

Height, massing and orientation

New development **should** be no taller than its surroundings in height. New development **could** contain a one storey basement if there is no risk of flooding.

The first floor **should** be set back from street frontage.

The primary aspect and windows **must** face towards the street.

Materiality

New development **should** be clad in a specified material contained within the material matrix (see Figure 4.12)

Green coverage and landscaping

New development **must** ensure no net loss of green cover. This **could** be in the form of a green roof.

Figure A2.7: Adolphus Road

Wittering House is an end of terrace development that provides a new two-bedroom home in a well-connected location. Its two-storey height and first floor set back aims to ensure loss of daylight to surrounding properties is minimised.

Figure A2.8: Sheendale

Sheendale Studios is a cluster of six studio houses built on the site of an old factory in south-west London. The design offers a contemporary interpretation of the adjacent architecture and represents one potential approach for how to architecturally address small site development in a sensitive neighbourhood or conservation area.

Figure A2.9: Barretts Grove

Barretts Grove provides seven new homes and uses the depth of the zone between the street and the façade of building to provide generous balconies. This is done whilst still creating a clear connection between the neighbouring frontages and its own strong building line.

A2.2 High street example design code

Character type description and analysis

Character type: Shopping street

Typical site conditions: This code applies to single storey retail unit with neighbouring buildings of three or more storeys. Such sites provide an opportunity for redevelopment with commercial use on ground floor and residential on the upper floors.

Figure A2.10 Typical high street condition this code applies to

Figure A2.11 Aerial of example high street site

Figure A2.12 Potential high street sites that this code could apply to

A2.2.2 The following page shows an illustration of what an example design code for this small site condition could cover.

Figure A2.13 Frontage and building line

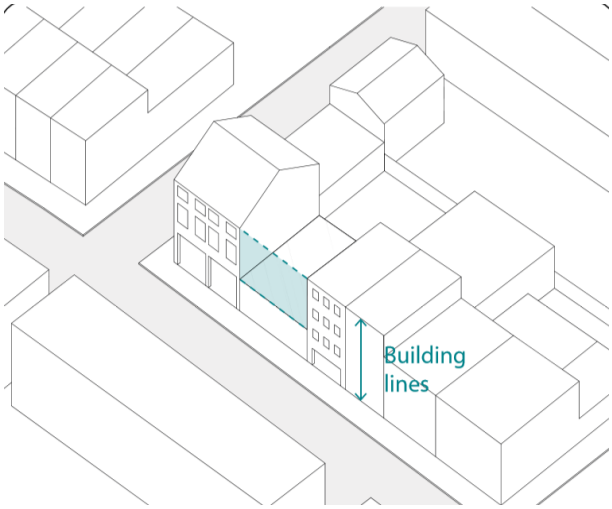


Figure A2.14 Street proportion

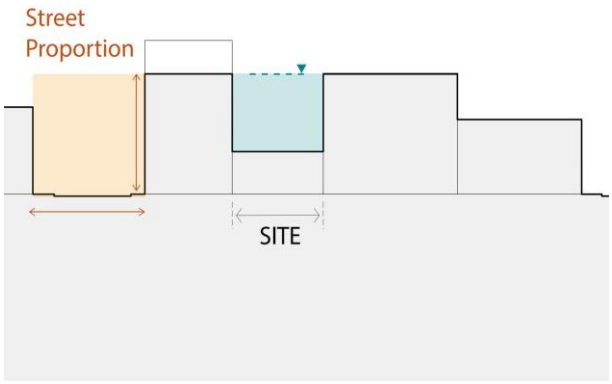
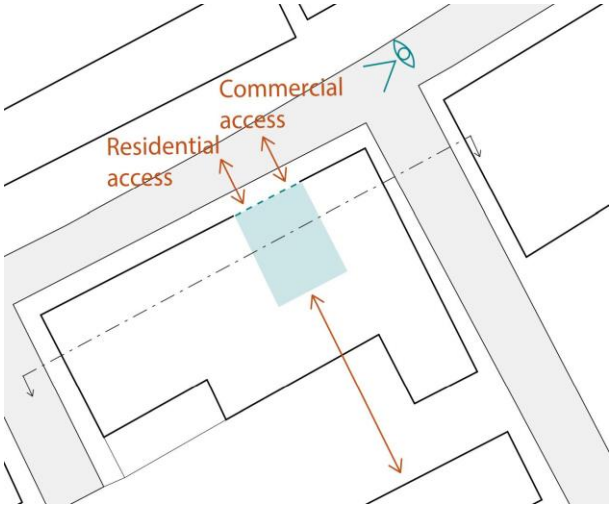


Figure A2.15 Access and movement



Built form and height

New development **should** have a consistent building frontage with the existing building line of the street within which it is located.

Building height **should** follow the predominant roofline and **could** provide an additional one or two storeys above providing it is stepped back.

Land use

New development **should** provide an active frontage and mix of uses on the ground floor with residential on upper floors.

Design and appearance

Where there is a variety of building types, the new development **should** follow the design and proportions of the predominant building style to avoid creating a fragmented streetscape.

The building materiality **should** be consistent with the specified materials contained with the material matrix (see Figure 4.13)

If street-facing balconies are proposed, they **must not** project over the pavement. Balconies **should** instead be located on the rear elevation or be inset balconies on the front elevation.

Access and servicing

New development **must** provide well-defined separate entrances to commercial and residential spaces.

(Image source: Tower Hamlets – Central Area Good Growth SPD)

Figure A2.16: Marley House, W6

This development in Hammersmith replaces a single storey extension to a public house. The development provides seven new homes while re-providing the A4 use at ground and lower ground floor.

Figure A2.17: 482 – 486 Roman Road

This development replaced two one-storey retail units that front Roman Road. The new development now provides four two-bedroom apartments and two commercial units on the ground floor.

Figure A2.18: 190 & 190A Rye Lane

This mixed-use high street infill provides 22 residential on the upper floors and in a former salvage yard to the rear of the high street. As well as providing a new frontage to the street, the development also retains and refurbishes an existing neighbouring building which is in the conservation area.

A2.3 Backland example design code

Character type description and analysis

Character type: Basic Terrace

Typical site conditions: Site where direct access to the street is limited. These sites are often located behind residential streets and may include residential garages or underutilised backlands.

Figure A2.19 Typical backland condition this code applies to

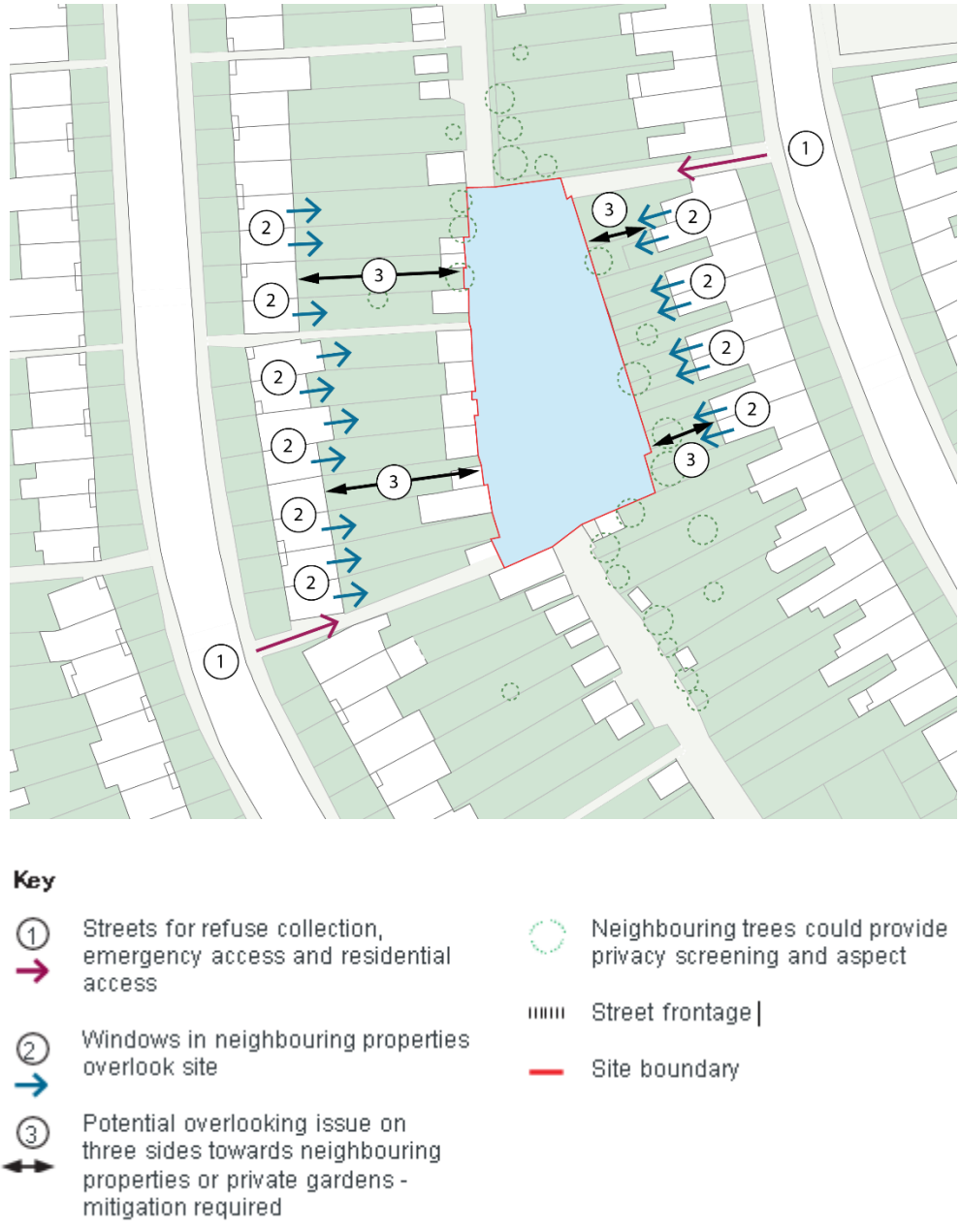


Figure A2.20 Aerial of example backland site

Figure A2.21 Potential backland sites that this code could apply to

Figure A2.22 Frontage line

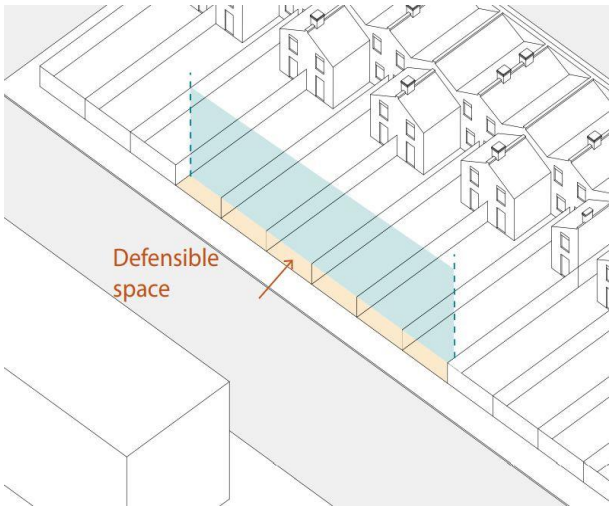


Figure A2.23 Built massing and roof line

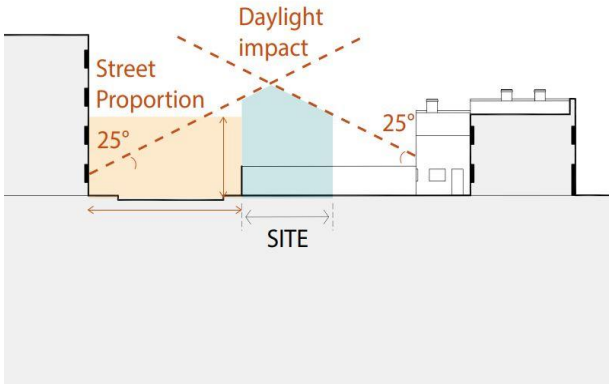
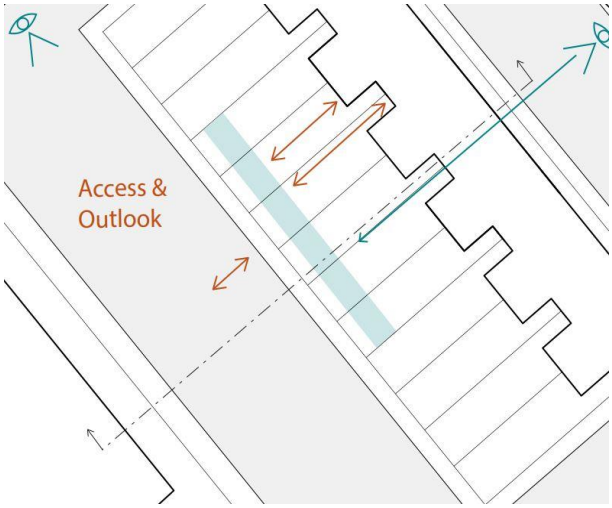


Figure A2.24 Access and outlook



Frontage line

New development **must** create a pedestrian-friendly street frontage.

The primary frontage **should** be street-facing to provide access and passive surveillance to the street.

Height, massing and orientation

New development **should** be no taller than its surroundings in height.

The built form **should not** intrude past the 25-degree angles shown in Figure A2.23.

Amenity space

Amenity space, internal layouts and landscaping **must** be carefully designed to provide adequate privacy in relation to surrounding buildings and back gardens.

Green coverage

There **should not** be a net loss of green cover. Where the development of a site causes the loss of green cover, this **should** be re-provided. This **could** be in the form of green amenity space, planting trees, incorporating green roofs and including other greening measures such as sustainable drainage systems.

(Image source: Tower Hamlets – Central Area Good Growth SPD)

Figure A2.25: Foundry Mews

This intensification of a backland, light industrial site demonstrates that small developments can both retain employment use and deliver much needed housing. The scheme comprises residential accommodation above workspace. All homes have external amenity space at first floor level in the form of enclosed patio terraces.

Figure A2.26: Strange House

This new home is located in an old pub yard, largely concealed from the street by an existing brick perimeter wall. The project carefully uses materials and existing site conditions to create a new home.

Figure A2.27: Hidden House

This house is located in a conservation area next to a Grade II listed former Victorian school on a site previously occupied by a caretaker's shed. The design carefully carves a space for the new residential dwelling on a site defined by the proximity of a tall perimeter brick wall.

A2.4 Residential extension example design code

Character type description and analysis

Character type: Basic Terrace

Typical site conditions: Upward extension of existing two storey terraced housing to create new homes or bedspaces.

Figure A2.28 Typical upward extension condition this code applies to

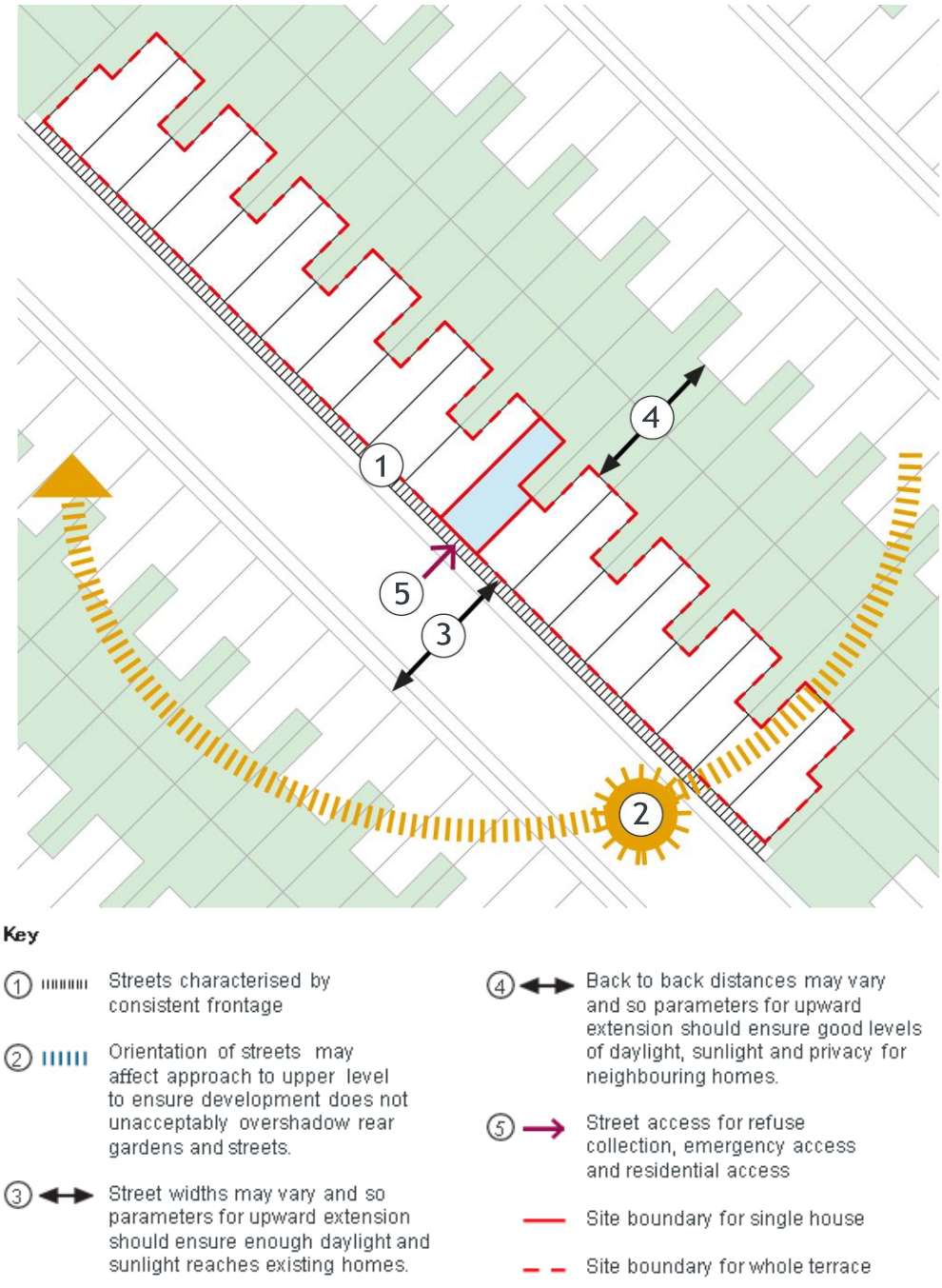


Figure A2.29 Aerial of example street suitable for upward extension

Figure A2.30 Potential sites that this code could apply to

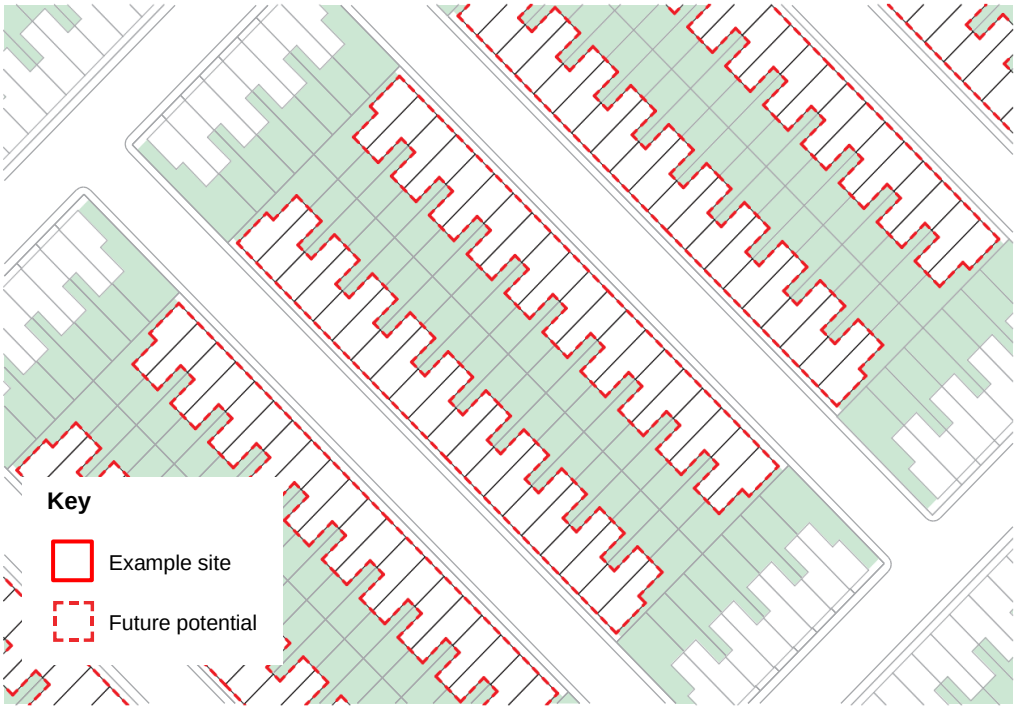


Figure A2.31 Existing street

Figure A2.32 Inappropriate extension

Figure A2.33 Appropriate extension

Roof

The extended roof **must** replicate the angle and pitch of the existing roof (and of the existing roofs on the street). Roof **should** be slated in a similar material (by look and appearance) to the existing roof.

Roof eaves **must** replicate the existing eaves. The distance from the head of the new 2nd floor windows to the new eaves **must** be the same as was the distance from the head of the existing 1st floor windows to the old eaves.

Windows

Windows **must** exactly match the floor below. This includes the windows of exactly the same dimensions and finish as the windows on the floor below.

The size and pattern of windows **should** be reproduced from the floor below. The line of the windowsills and heads will set the line of fenestration which **must** be maintained.

Bay window **must** be extended to the additional floor, with the bay window roof replicated at the new level.

Height

Height of the extension **should** match those on the floor below. This **should** include matching the same distance from windowsill to the head of the window below as found in the existing house.

New and modified pitched roofs **should** follow the original roof in materials and detailing.

Material and detailing

All materials **must** match the original house.

Extensions **should** seek the retention and reinstatement of all original, decorative brick and stone details to elevations of extended houses and such details **should** be replicated where appropriate in extensions.

Chimney stacks

Chimney stacks **should** be extended to match the original stack. Traditional clay pots **should** be reused where possible or renewed to match the original.

(Image source: Haringey - House Extensions in South Tottenham SPD)

Figure A2.34: Estcourt Road

This row of two storey terraces have all been extended upwards, using mansard roofs, to add additional living space while creating an attractive streetscape. High take up of upward extensions and the consistent design of windows and roof line has also led to an improved streetscape.

Figure A2.35: Abbey Road

Using modular construction, this one storey rooftop extension provides a new two-bedroom home. As part of extension, the existing façade and communal areas were refurbished to improve the housing block for existing residents (see Figure 2.12 for an image of the block before redevelopment)

Figure A2.36: Lealand Road, N15

The upward extension on these two terraced properties has been allowed through the adoption of a strict design code in Haringey. The design code applies to a number of streets in which uptake has been high. For more information, see Haringey's House Extensions in South Tottenham SPD.

Planning conditions

A2.4.2 It is encouraged to draw up a list of planning conditions for each design code. These planning conditions could include the reinstatement of original architectural features that may have been lost since first built. Providing a list of planning conditions can encourage improvements to the overall streetscape. Encouraging joint planning permissions can also ensure extensions are part of wider programme of street-wide upward extensions.

Figure A2.37 Architectural detailing that could form part of the planning conditions for an upward extension

Source: Tower Hamlets - Driffield Road conservation area character appraisal and management guidelines

Figure A2.38 Fitzroy Road, Primrose Hill – A joint planning permission and construction project has ensured a consistent streetscape