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DESIGN GUIDE
SUPPLEMENTARY PLANNING DOCUMENT

ADOPTED MARCH 2017

INFORMATION BOX: The Design Guide Supplementary Planning Document (SPD) was adopted by Cabinet in March 2017, and is a material consideration in the determination of planning applications. It provides detailed guidance for the application of policies in the Core Strategy including Policy PMD2. It is therefore an important document in helping to deliver the spatial vision and objectives of the Core Strategy, particularly in terms of ensuring that new developments are of a high design quality and respond appropriate to the local context.

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1.0 INTRODUCTION

Setting a Design Standard for Thurrock

1.1 Thurrock's character and personality has formed and evolved over centuries as agriculture, industry and the river have shaped the landscape, the make-up of its people and the quality of life.

1.2 With a population of around 160,000, Thurrock lies on the River Thames immediately to the east of London, and is home to some of the most exciting opportunities in the country. Thurrock hosts three international ports including London Gateway and the Port of Tilbury, which are at the heart of global trade and logistics. It is strategically positioned on the M25 and A13 corridors with excellent transport links west into London, north and east into Essex and south into Kent.

1.3 Thurrock has one of, if not the, largest and most ambitious growth programmes in the country, with over £6bn of investment driving the creation of 26,000 new jobs and 20,000 new homes over the next 20 years. With that many additional people choosing Thurrock as a place to live, work and play, the need has never been greater to strengthen the identity of Thurrock as a destination and to ensure that all new development is sustainable and contributes towards the creation of healthy communities.

1.4 This Design Guide is the first of many steps the Council and its partners need to take to substantially raise design standards across the borough.

1.5 The main aim of the Design Guide is to improve the overall design quality standards of development in Thurrock, enhancing perceptions of place and reinforcing a strong sense of civic pride. In order to achieve this the Council will:

1. **Provide clear guidance on the Council's expectations regarding the design approach to be adopted in Thurrock**

2. **Work proactively with the development industry to bring forward proposals in a timely and effective way having regard to statutory policy requirements**

3. **Lead by example through the design and implementation of Council-led development projects in Thurrock**

Understanding Thurrock as a place

1.6 The character of a place strongly influences people's perception of an area. It not only plays a fundamental part in the quality of the local surroundings in which people live and work, but also establishes an overall image. Many factors contribute to the character of the area, including the scale and design

of buildings and their settings, the surrounding landscape and countryside and the impact of road traffic schemes.

1.7 Thurrock has often been described as a place of contrast and it is home to a number of paradoxes with busy towns and picturesque villages framed by an established industrial backdrop along the River Thames.

1.8 The built up areas of Thurrock vary quite considerably from turn-of-the-century development related to the borough's early commercial growth to large inter-war and post-war suburban housing schemes, riverside developments pepper-potted with industrial and residential uses, large retail parks and contemporary housing schemes. For the most part, the development of new communities in the borough has been in response to major business growth. Tilbury was designed and expanded to provide homes for people working in the Port; East Tilbury Bata estate developed to support the Bata shoe factory, which came to Thurrock from Czechoslovakia; and cottages were developed throughout Purfleet to support the riverside industries.

1.9 The historic environment of Thurrock has over the years continued to have a powerful influence on people's quality of life by promoting civic pride and a sense of local identity. Important local architectural, archaeological and landscape features such as the forts, the medieval parish churches and Bata village all highlight the area's unique history. In terms of designated heritage assets, the borough has 7 Conservation Areas, 243 Listed Buildings, 17 Scheduled Ancient Monuments and 23 Ancient Woodlands.

1.10 Thurrock's countryside is also varied in character. It has areas of traditional landscape, particularly along the Thames to the east of Tilbury where historic and social influences have determined its use and development. It includes woodlands, meadows, wetlands and other wildlife habitats of nature conservation value. Much of the borough's character is naturally flat, open marshland, largely due to its location on an old river terrace of the Thames. These vast open spaces have a wild and windswept character that is accentuated by broad expanses of sky.

1.11 Because of its geology, the borough has, for centuries, been a source of mineral resources, including sand, gravel, chalk and clay. As a result, Thurrock has a history of mineral extraction and subsequent tipping operations which have drastically altered the landscape in localised areas. There are now many areas of the borough in which enhancement of the landscape is needed specifically to address the legacy of these activities, particularly where restoration of the land has been poor or lacking. However, there are some areas where the processes of natural regeneration have had time to restore the landscape and local wildlife habitats.

1.12 The River Thames features prominently in the historical development and present-day character of Thurrock and remains a major asset in terms of its

industrial and transportation roles, with attendant employment and economic benefits, and also because of its amenity value. Thurrock's river frontage extends some 18 miles from Aveley Marshes in the west to the former oil refinery at Coryton in the east of the borough. Although the Thames is visible from many distant vantage points, the traditional commercial uses of the river frontage have tended to deter significant access by residents to both the water surface and the river banks in some locations. Moving forward there is a desire locally to see access to the river for residents improved.

<INSERT BASE MAP OF THE BOROUGH WITH IMAGES OF KEY DEVELOPMENTS WITHIN THE BOROUGH SHOWING THEIR LOCATIONS AND REINFORCING THE POINT THAT THURROCK IS A PLACE OF CONTRASTING, UNIQUE CHARACTER>

Understanding the people of Thurrock

1.13 The population of Thurrock is relatively young with a large proportion of the population of working age. Nearly a third of households are families and lone parents with dependent children. With the current housing market, this means more young people are living at home for longer and unable to move on from the family home. The older population, in particular, is projected to grow significantly in the next twenty years, moving more in line with the national average, placing additional pressures on housing and social care services.

1.14 In Thurrock, the general health of the population is good,with a below-average number of residents experiencing long-term health conditions or disabilities. However, at the local level there are clear health inequalities, with life expectancy in the most deprived areas more than eight years lower for men and seven for women than those living in the least deprived locations.

There is a high rate of obesity for both children and adults, compounded high levels of inactivity and unhealthy eating.

1.15 Good design can play an important role in creating healthy, inclusive and active communities. For example, positive placemaking can lead to reductions in health inequalities including obesity by encouraging physical activity through the use of active streets, open spaces and integrated leisure facilities. Planning can also facilitate social interaction which in turn can lead to improvements in mental health and general well-being.

Using the Design Guide

1.16 The Design Guide is an adopted Supplementary Planning Document (SPD) and is a useful tool to inform and assess proposals at all scales, from small infill sites through to larger developments including major regeneration schemes. A range of more detailed design guide documents that include specific design standards will support the Design Guide SPD.

1.17 The Design Guide is set out over four main sections:

Section 2 - provides an overview of relevant national design policy and guidance which Thurrock Council will use in assessing and determining proposals.

Section 3 sets out Thurrock Council's requirements regarding assessing the context of a site, including a checklist of key questions that will need to be addressed as part of the design process. The section is illustrated with examples from within the borough and elsewhere.

Section 4 gives detailed guidance on the special characteristics of each of the five broad place typologies. Again, this section is illustrated with examples from within the borough and elsewhere.

Section 5 provides a checklist of pre-submission, submission and post-submission design requirements that Thurrock Council will expect in support of planning application proposals.

1.18 Failure to comply with the relevant local and national design policies would result in a planning application being recommended for refusal. More information on these policies can be found in Section 2.

2.0 THE IMPORTANCE OF GOOD DESIGN

Investing in Design Quality

2.1 Research by the Commission for Architecture and the Built Environment (CABE) and the Homes and Communities Agency (HCA) has shown that investing in design can add a great deal of value to a scheme and the wider area by improving the economic viability and by delivering social, environmental and health benefits. It is no accident that attractive parts of Thurrock, areas such as the Avenues, Horndon on the Hill and Orsett, for example, benefit from higher property values. The quality of these types of locations can and will influence where people choose to live and invest.

<INSERT DIAGRAM/SMART GRAPHIC – SHOWING SOME OF THE ECONOMIC, SOCIAL, ENVIRONMENTAL AND HEALTH BENEFITS OF GOOD DESIGN >

2.2 The research also shows that improving the design quality of a scheme benefits a wide range of stakeholders including investors and developers by providing good returns through higher sales value and higher demand as they will have access to a better quality environment.

Planning and Design Policy

2.3 The Design Guide sets out overarching design principles and best practice to guide the design quality of development proposals. It elaborates on the principles set out in both national and local planning policy documents and sets out how development proposals can achieve them.

<INSERT DIAGRAM SHOWING POLICY DOCUMENT STRUCTURE>

NATIONAL PLANNING POLICY FRAMEWORK
PLANNING PRACTICE GUIDANCE
CORE STRATEGY AND POLICIES FOR MANAGEMENT OF DEVELOPMENT
DESIGN GUIDE SPD
- RESIDENTIAL ALTERATIONS AND EXTENSIONS
- NEW RESIDENTIAL DEVELOPMENTS
- INDUSTRIAL AREAS
- TOWN CENTRES AND TRANSPORT HUBS

National Planning Policy Framework

2.4 The National Planning Policy Framework (NPPF) sets out high-level design policies relating to sustainable development, town centres, transport, housing

and health. The importance of good design is expressed throughout the document and is identified as one of the twelve core planning principles that should underpin plan-making and decision-taking.

2.5 There are several key paragraphs in the NPPF that are considered to be relevant to both the production of the Design Guide and in the determination of planning applications. These include but are not necessarily limited to Paragraphs 56-68.

2.6 The key design principles set out in the NPPF are summarised in **Table 1: Policy Summary**.

National Planning Practice Guidance

2.7 The National Planning Practice Guidance (NPPG), launched in March 2014, supports and expands on the design-related content in the NPPF. The guidance replaces a number of previous documents, including "By Design: Urban Design in the Planning System-Towards Better Practice" (2000), "Safer Places: The Planning System and Crime Prevention" (2004), and Going to Town: Improving Town Centre Access (2002). The guidance is intended to be a live resource that is continually updated. **Table 1: Policy Summary** includes the main points set out in the guidance at the time of publication.

Thurrock Local Development Framework Core Strategy and Policies for Management of Development

2.8 The Council's Core Strategy and Policies for Management of Development Plan sets spatial objectives for the development of the borough. The Core Strategy was originally adopted on 21 December 2011 and subsequently updated on 28 January 2015. Several policies within the document support the Council's ambition to promote high-quality design in Thurrock and progress opportunities to improve the quality of the environment throughout the borough. The most relevant policies are Policies CSTP22, CSTP23 and PMD2.

Table 1: Policy Summary: The relationship between design principles expressed in the NPPF, NPPG and this Design Guide.

National Planning Policy Framework	**National Planning Practice Guidance**	**Thurrock Core Strategy**	**Thurrock Design Guide**
Create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and	**A well designed public space is lively** – public spaces available for everyone to use bring neighbourhoods together, provide space for social activities and civic life	Policy CSTP22 - Thurrock Design: V Policy PMD2 – Design and Layout: ii, iii, v, vii	Making connections: C1, C3
Places are visually attractive as a result of good architecture and appropriate landscaping.	**A well designed space has a distinctive character** – what makes a place special and valued, reflecting the areas, function, history and potential need for change	Policy CSTP22: Thurrock Design: I, VI Policy PMD2 – Design and Layout: I, iii, viii	Understanding the place: A1, A2 Working with site features: B5
Establish a strong sense of place, using streetscapes and buildings to create attractive and comfortable places to live, work and visit;	**A well designed space promotes ease of movement** – being able to move safely, conveniently and efficiently on routes which are well connected	Policy CSTP22 - Thurrock Design: I, III Policy PMD2 – Design and Layout: I, ii, iii, vi	Working with site features: B2 Making connections: C1, C2, C3
Respond to local character and history, and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation;	**A well designed space is attractive** – how a place looks, feels and even smells	Policy CSTP22- Thurrock Design: I, III Policy PMD2 – Design and Layout: I, iii, iv	Understanding the place: A1, A4, A5, A6 Working with site features: B1, B3 Building in sustainability: D1, D2

Optimise the potential of the site to accommodate development, create and sustain an appropriate mix of uses (including incorporation of green and other public space as part of developments) and support local facilities and transport networks;	**A well designed place supports mixed uses and tenures** – a good mix of uses and tenures makes a place economically and socially successful **A well designed place is functional** – fit for purpose, delivering the intended function and achieving value for money	Policy CSTP22 - Thurrock Design: I, VII Policy PMD2 – Design and Layout: iv, ix, x, xii	Understanding the place: A3, A7 Working with site features: B2, B3, B4, B5 Making connections: C1, C2, C3, C4 Building in sustainability: D3
Developments that function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;	**A well designed place is adaptable and resilient** – is able to adapt to changing circumstances and demands	Policy CSTP22 - Thurrock Design: II, VII, IV, VII Policy PMD2 – Design and Layout: xi	Understanding the place: A7 Working with site features: B3, B5 Making connections: C1, C2, C3 Building in sustainability: D1, D2, D3, D4

Local Plan Evidence Documents

2.9 Local Plan documents must be based on robust evidence about the economic, social and environmental characteristics and prospects of the area. These evidence documents can also be used by applicants to inform the type and design of development proposals they put forward for consideration by the Council. Key documents that could and should be used by applicants include but are not limited to:

- Thurrock Integrated Landscape Character Assessment and Sensitivity Evaluation
- Conservation Area Appraisals and Management Plans
- Thurrock Active Place Strategy

2.10 More information on these studies can be found on the Council's website.

Additional Resources

2.11 In addition to the policies and background evidence documents stated in this section there are a number of non-statutory design documents that may provide useful information or guidance when you are developing a scheme, including:

- Active Design by Sport England and David Lock Associates
- Building in Context Toolkit by Design Council CABE, Design South East and Heritage England
- Building the foundations – tackling obesity through planning and development by LGA
- Building for Life 12 by Design Council CABE
- Good Practice Advice Note: The Setting of Historic Assets by Heritage England
- Landscape and Visual Impact Assessment by Landscape Institute and Institute of Environmental Management and Assessment
- Manual for Streets and Manual for Streets 2 by DCLG and DfT
- Secured by Design Guides by Official Police Security Initiative
- Working together to promote active travel (2016) by Public Health England

3.0 DESIGNING IN CONTEXT

Site Appraisal

3.1 The starting point for every development proposal must be a detailed study of the site and its physical context. This is of key importance to **gain a proper understanding of place** and **establish locally distinctive and responsive designs.**

3.2 An appraisal will need to cover many aspects of a site and its physical context. In Thurrock the diverse nature of settlements and landscapes mean that the need for a robust appraisal is critical to the success of a scheme's design. The level of detail set out in the appraisal should be proportionate to the size and complexity of the site – the appraisal of a small infill scheme, for example, will be more straightforward than that of a substantial regeneration or development site.

3.3 In preparing a site appraisal, developers will be expected to take the following considerations into account:

A. Understanding the place
B. Working with site features
C. Making connections
D. Building in sustainability

3.4 Each of these considerations are discussed in more detail over the following pages.

A. Understanding the Place

3.5 A proper understanding of place is crucial to ensuring that design proposals respond positively to a given location. In order to ensure that new developments take account of the character of an existing place, the Council will require proposals to demonstrate how the design and layout has responded to:

A1. The strategic and local setting and key views
A2. Strategic Green Infrastructure and landscape
A3. Character, layout and local features
A4. Site boundaries and adjacent land uses

A1. Appreciating the strategic and local setting and preserving key views

3.6 Where a site is located and how that site relates to the strategic features of borough is a natural starting point. A robust site appraisal should begin with appreciating the site's location in relation to the key physical and geographical features within Thurrock, for example principal routes, the River Thames, the principal settlements, landform and rural areas. It will also include an analysis of the immediate setting, including local streets, spaces, land-uses and other built/natural features.

3.7 The topography of the site and wider landform, in combination with natural and built features, all influence how development will affect views. Views to and from the site can be important especially if development is likely to affect the setting of existing heritage assets and landmarks. Retaining such views can contribute to the structure and legibility of a new development.

3.8 For larger sites or sites affecting the setting of a heritage asset, the Council will expect an analysis of views within and around a site and how these have been accounted for by the design process. Depending on the site, surrounding features, and the scale and type of development proposed, a robust landscape assessment may be required to establish existing conditions and assess the potential effects on the wider setting.

A2. Incorporating strategic green infrastructure features as part of a landscape framework

3.9 Green infrastructure relates to the wide variety of landscape, vegetation and habitat features that exist within the borough. Thurrock Council aims to establish a high quality, functional green and open space network that is well related to a wider network in the Thames corridor.

3.10 Thurrock's green infrastructure includes a wide variety of open spaces and natural features, from the expanse of the marshes, fenland and farmed

woodlands; parks, highways verges, and private gardens; and ponds, trees and vegetation. The spaces provide multiple functions including recreation, cultural heritage, wildlife habitat, flood management and cleaner air and water.

3.11 To gain the most from these spaces they need to be designed and managed for multiple benefits and to be connected to the wider network of spaces by recreational routes and wildlife corridors. Thurrock Council will expect development proposals to:

- **make the most of existing open spaces**
- **create new spaces that are well integrated with near by spaces and green infrastructure networks**
- **sit comfortably within the varied landscapes of Thurrock**
- **minimise the impact to the borough's biodiversity and habitats and provide net gains where possible**

3.12 The site appraisal should inform how proposals can work with existing site features and incorporate them into the green infrastructure that forms part of a robust landscape framework. The Council has commissioned an update to its landscape characterisation study. When complete, this will provide useful information to applicants about the different landscape elements that make up the borough and assist them in demonstrating how sites relate to the wider landscape context.

A3. Understanding and responding to the character of surrounding development

3.13 A well-designed scheme will be expected to interpret and respond to the character of surrounding development. This comprises the nature, combination and appearance of buildings, structures, streets, and spaces together with landscape and natural features. It can be analysed having regard to structure, grain, scale, and density.

3.14 How the site and surrounding area has evolved and changed over time provides important context. It influences the basic **structure** of a place i.e. the pattern of development blocks, streets and spaces, and its **grain** – the composition of development blocks, be that a few significant buildings or a large number of small buildings, or a combination of both.

3.15 Thurrock Council will expect an analysis of the prevailing structure and grain of a particular development location to show how the design has responded to its context. OS mapping and figure ground analysis will reveal the structure and pattern of development including its grain as well as reference to historic map data.

3.16 **Scale** is used to describe the size of blocks and also the size of individual buildings. **Mass** relates to the overall volume. Analysing the scale and

massing of existing development in the vicinity of a site, or in a comparable location, should inform the design of proposals and help integrate them with the existing context.

3.17 **Density** is a measure of the amount of development in a given area, usually expressed as dwellings per hectare. Understanding the prevailing density of an area will help reinforce an understanding of the site and how the design of new development should respond. Different densities within a development may be acceptable provided that the design response can relate well to the wider context.

3.18 In addition, architectural detail and materials also have a significant impact on the character and identity of a place. The site appraisal will record any key features that contribute to a place's identity with an audit of materials used. Good design uses this information to create a proposal that is distinctive yet locally relevant, without resorting to pastiche or to justify more of the same.

3.19 There are many parts of Thurrock which have a positive and attractive character. In areas that have a less distinct or attractive character, Thurrock Council will expect proposals to establish a positive benchmark for change with design quality that raises the bar.

3.20 In assessing character, regard must also be had to the broad typology of the area, taking account of those identified within this Guide: **Urban Centre and Transport Hubs**; **Residential Neighbourhood**; **Commerce and Industry**; **Thurrock Lakeside**; and **Rural Locations** (see **Section 4**).

A4. Responding to site boundaries and adjacent land uses

3.21 The immediate boundaries and adjacent land uses of a site must be clearly identified and accounted for as part of the design process and will have a significant impact on the type of design response required. This will include issues of maintaining privacy and amenity where residential development edges a site; protecting against noise and disturbance where major infrastructure or industrial uses edge a site; or ensuring that development positively addresses edges that comprise an area of open space, waterbody, or riverside, notably the Thames.

3.22 Thurrock Council will expect an appraisal to demonstrate how the design relates to site edges and how the proposal has appropriately responded. This will help to inform the composition of uses that the site should accommodate and where appropriate uses should be located relative to one another.

3.23 There are a large number of major industrial and commercial areas across Thurrock, much of it focussed on the River Thames corridor clustered around Purfleet, West Thurrock, Tilbury Docks, and Coryton. Major transport routes

and corridors also cross parts of the borough including the M25, A13, A1089 and A1014 as well as local, national and international rail routes.

3.24 Sites within or close to these areas have a challenging context to work with and in most cases the design response will need to consider the proximity and scale of these uses and how their impacts could affect new development. Site layout and orientation away from the "bad neighbour" must be carefully considered, as well as opportunities for physical interventions such as landscaped bunds. In addition, the positioning of less noise-sensitive uses within the site can minimise impacts.

B. Working with Site Features

3.25 As well as green infrastructure and landscape considerations, there are other site features that must inform the appraisal process and eventual design proposal. These can have a positive impact; heritage assets and water features for example, or must be addressed in order for a safe environment to be established, dealing with issues of contamination for example.

3.26 In appraising a site's features and immediate context the Council will expect proposals to demonstrate how the design and layout have responded to:

B1. Heritage assets
B2. Topography
B3. Water features
B4. Physical and hidden constraints
B5. Green Infrastructure

B1. Identifying, preserving or enhancing heritage assets

3.27 Heritage assets include formally designated listed buildings, conservation areas and scheduled monuments. There are other buildings, structures or other features that could be of historic or cultural interest even though they aren't formally listed.

3.28 Within the area there may also be wider historical cultural references that could be exploited to create a place that is distinctive and locally grounded. Such features must be carefully considered as part of the design process, to not only preserve or enhance their character and setting but also as features around which proposals can be shaped. This will contribute towards establishing local character and place identity.

B2. Working with the existing topography of the site

3.29 The landform of a site can constrain development if it includes steep slopes or highly visible areas with a sensitive natural or built setting. Prominent areas create opportunities for new viewpoints and locations for landmark buildings. Developments that work with the contours of a site will help to create a logical structure. They can also address matters of local drainage, micro-climate and aspect. The latter can contribute towards maximising solar gain.

B3. Positively addressing water bodies and courses in and around the site including the River Thames

3.30 Thurrock has a variety of water features that include rivers, lakes and water courses with The Thames being the most significant asset. The Thames provides an historic focus for Thurrock as well as supporting a diverse range

of major employment sites and centres for local and national economic activity including the ports. Significant marsh and grassland habitats adjoining the river also support a diverse range of species, particularly birds.

3.31 Where water features are included at the edge of or within a site, development must be designed to have a positive relationship including active frontages and a well-integrated public realm. Water features can also be used to create focal points in new developments.

B4. Identifying and mitigating physical constraints

3.32 Physical constraints can include redundant buildings, access roads, hard standings and overhead transmission lines. Hidden constraints include underground services and areas of former landfill or potential contamination. Whilst some of these constraints can be moved, others will need to be integrated into the development design and layout.

B5. Identifying and incorporating green infrastructure, existing open spaces and wider networks as part of a robust landscape framework

3.33 Well-designed developments must carefully integrate open space into the layout as part of a landscape and open space framework. Opportunities to create focal points with spaces should be exploited to help create a logical structure and enhance a sense of place. More informal spaces can also be valuable for linking wider green corridors and protecting and enhancing biodiversity and habitats.

3.34 **Thurrock Council will reject proposals that have failed to appropriately consider the importance of open space and opportunities to use open space as an integral part of the development layout**.

3.35 In some parts of the borough, the Council have identified a requirement for additional open space to meet local need over and above that required as part of development proposals. Developers should discuss opportunities to help address shortfall with the Council including enhancing existing open spaces enabling them to be used more intensively.

C. Making Connections

3.36 A key consideration in the design process is establishing safe and effective connections for all modes between development sites and their surroundings in order to integrate development into existing settlement patterns as well as encourage sustainable and healthier patterns of movement. Connected places also assist in establishing integrated communities, particularly where the co-location of shared facilities can benefit existing as well as future residents, e.g. new schools.

3.37 Thurrock Council will expect development proposals to build on guidance offered through external documents, including 'Manual for Streets' and 'Manual for Streets 2', to ensure that schemes consider quality of place as well as movement and safety. Key considerations must include:

C1. Integrating the site to the local movement networks
C2. Establishing a clear and legible hierarchy of streets
C3. Promoting sustainable and active travel networks
C4. Integrating car parking and providing for cycle parking

C1. Integrating the site to the local movement networks

3.38 In Thurrock, a wide variety of movement networks have been established over time. These include strategic networks of major roads and rail corridors which provide access across the borough and beyond but can provide a barrier to local movement patterns. In addition to these networks the borough also has a finer network of local streets, footpaths and cycleways ranging in character from busy high streets, tree lined residential streets, terraced streets, and rural lanes.

3.39 In areas with a more traditional and finer pattern of streets, existing connections will more readily inform the pattern of connections within the site. The site appraisal should also consider whether there are any existing footpaths, public rights of way or bridleways around or across the site in creating a design response. The design could include footpath routes through the site which will incorporate or connect to these existing routes. Again, this ensures that different neighbourhoods and communities are linked together.

3.40 In locations where the existing context is dominated by cul-de-sac layouts, it will be important to make the most of the few opportunities that do exist to integrate connections to and through the site. This may also create opportunities to change the character of peripheral distributor roads, identifying places where frontage development can be introduced together with space for pedestrian and cyclists.

C2. Establishing a clear and legible pattern of streets

3.41 When creating a network of paths and streets it is important to remember that streets and paths are potentially the most permanent features of the built environment. The context of existing development and movement patterns will influence the design of a logical network and hierarchy of streets. A route network that is easy to navigate is important to the creation of a favourable image of a place.

3.42 Where possible streets must link together key locations, uses, and public spaces within and around the site, providing access for all modes but giving priority to pedestrians, cyclists and public transport. Opportunities should be taken to enhance the route network by removing clutter and improving the streetscape and lighting to enable easy, safe, pleasant and direct routes. Encouraging pedestrian movement and sustainable travel will also improve the health of Thurrock's residents..

3.43 Streets do more than create a shopping or movement environment. They are also social spaces. The roles of streets and spaces should be considered from the outset in the design process and consider how the space can be used for sitting, meeting and socialising, strolling, play, reflection, accessing public transport, getting quickly from A to B, pavement cafés, arts and cultural events, markets, festivals or other activities. In design terms, all streets must be fronted by development, with principal entrances, doors and windows addressed the public realm. This provides a sense of enclosure as well as opportunities for passive surveillance.

3.44 Thurrock Council will also require where ground conditions allow for street trees to be incorporated as part of the hierarchy of streets in all developments. Street trees already contribute significantly to the character and identity of different locations in Thurrock. Elements of on-street parking should also be accommodated as part of the street network.

3.45 The hierarchy of streets is not meant to be rigidly applied and does not necessarily mean that it is always more important to provide for pedestrians than it is for other modes. However, they should at least be considered first, ensuring that the street will serve all of its users in a balanced way.

3.46 Primary streets form the main points of access capable of integrating public transport routes and also providing an attractive environment for pedestrians and cyclists. Primary streets are usually defined by development that is greater in form, scale and density with a focal points for schools, shops and community facilities.

3.47 Secondary streets are generally narrower, with mostly residential frontages. These streets should be designed with alignments, building lines or other public realm features that establish a traffic calmed environment. Junctions with primary streets must be emphasised through provision of a building

corner, differentiated public realm, and tree planting. This aids legibility by highlighting the change from one type of street to another.

3.48 Tertiary streets is a term that refers to small lanes providing local connections between secondary streets, mews developments and courts. These streets contribute towards the overall permeability of the development. In these areas, it may be appropriate to consider shared surfaces and home zones.

C3. Promoting sustainable and active travel networks

3.49 Streets that are well connected to existing movement networks, public transport services and local facilities have the potential to increase travel choice. They can in turn make walking and cycling more attractive for local journeys or simply for recreation and therefore encourage "active travel". Local connections to existing schools or for new education facilities in the proposed development in particular will offer opportunities for walking to school.

3.50 Integrating walking and cycling routes with a network of open spaces, green corridors and recreational routes within and outside developments will also promote active recreational lifestyles including walking and cycling for leisure and sport activities and play. Reference should be made to Sport England publication **'Active Design'** (2015) and Design Council CABE's **'Active by Design'** (2014). The TCPA publication '**Planning Healthy Weight Environments**' (December 2014) also provides useful guidance.

C4. Integrating car parking and providing for cycle parking

3.51 Parking is a critical design consideration. Adequate space must be provided to serve the proposed development, assessed within the context of proximity to public transport. A mix of both on-street and on-plot car parking should be provided, with designs allowing for discrete groups to reduce overall visual impact within the street-scene.

3.52 Tree and landscape planting should be provided to further reduce visual impact particularly for on-street parking provision or where substantial areas of car parking are required for a particular use or mix of uses.

3.53 Provision should also be made for cycle parking and storage, together with an allowance for electric charging points.

D. Building in Sustainability

3.54 The way places and buildings are designed and constructed has a direct and indirect impact on the quality of our lives and health as well as on energy use, natural resources and our immediate and wider natural environment. In appraising a site's features and immediate context, developers will be expected to demonstrate how the design and layout has responded to:

D1. Opportunities to minimise the consumption of energy to heat, cool, ventilate and light buildings and spaces
D3. Opportunities to integrate local and sustainable energy generation
D3. Integrating SUDs
D4. Adaptability over time

D1. Identifying opportunities to minimise the consumption of energy to heat, cool, ventilate and light buildings and spaces

3.55 The design and layout of a building or site can minimise the energy requirements of the occupants, reducing energy resources and minimising greenhouse gas emissions. Furthermore, energy efficiency measures deliver considerable savings in running costs during the life of the building. One of the simplest methods of reducing energy demand is to use passive solar designs to provide heat and light. Building orientation, materials and landscaping can also have a significant localised effect on climatic conditions. Public spaces can also capture passive solar energy and use passive principles such as orientation and reflective materials to reduce their energy demand.

3.56 Lighting public space is expensive and there is an increasing concern of the environmental impact of lighting. Where possible, opportunities to minimise energy consumption should be explored through energy efficient lighting, optimising control systems and using renewable energy to meet demand. Good lighting design, management and consideration of life expectancy of systems will lessen carbon impacts.

3.57 Undertaking a robust site appraisal will assess how the site is oriented in relation to the local topography and weather pattern, including the sun, prevailing wind conditions and take into account other site features that will have an effect on local micro-climates. An important related consideration will be topography and aspect and how this can be used to inform the design and layout and contribute towards passive solar gain, for example.

D2. Identifying opportunities for sustainable energy generation

3.58 There are a number of renewable and low energy technologies which are typically suitable for integration with buildings and environments. The most effective technology (or technologies) will depend on a range of factors

including things such as site features, and the likely scale and energy use of the development. A site appraisal should identify opportunities for integrating on-site energy generation including renewable energy. There may be sites that are located close to industrial activities that could take advantage of waste heat.

3.59 For smaller residential developments, Permitted Development Rights now cover many micro-generation renewable projects. An interactive house on the Planning Portal website (see http://www.planningportal.gov.uk/permission/) provides guidance on whether or not planning permission is likely to be needed on many common householder projects, including micro-generation renewable installations.

D3. Incorporating sustainable drainage measures into the design and layout

3.60 Adaptation improves the ability of the system to adjust to climate change and reduces environmental vulnerability to potential damage. Anticipating these consequences, the council will expect that principles of Sustainable Urban Drainage Systems (SUDS) are incorporated into new development and particularly into public realm improvements. This will ensure that run off is held and absorbed without overloading storm water drain capacity. The cumulative impact of small schemes incorporating hard landscaping can have a negative effect on the built environment. Development proposed in areas at risk of flooding will also be required to submit a Flood Risk Assessment.

3.61 Assessing the hydrology of the site, along with landform, geology, drainage and flood risk, should reveal the scope for integrating SUDs into development with the measures that will work best for the site. An important, related consideration will be the green infrastructure across and around the site, presence of existing watercourses and features, and how these can all be integrated into a comprehensive landscape framework.

D4. Including space for storage and adaptability over time

3.62 Places should be adaptable at every scale. Dwellings should be capable of adapting to the needs of the occupants, for example extensions, or the need for wheelchair accessibility. Similarly towns and neighbourhoods should be adaptable to changing economic, environmental and technological conditions.

3.63 A critical but frequently overlooked part of the design process is the inclusion of adequate space for servicing and storage. This must include provision for wheeled bin and recycling provision, utilities meters, cycle and more general storage space e.g. for pushchairs and lawnmowers, and for the servicing of commercial and business premises. As a general rule, such features must be seamlessly integrated as part of the overall design and built envelope of the building, be unobtrusive from the public realm and readily accessible. In

addition, design proposals must have reference to Building for Life principles covering use and adaptability over time.

Summary Appraisal Checklist

3.64 A summary of the key questions to consider for the site appraisal is set out below. Thurrock Council will expect these questions to be addressed as part of the overall site appraisal process.

Table 2: Summary Site Appraisal Checklist

Key Design Considerations	How Addressed?
A. Understanding the Place Where is the site located and how does it relate to Thurrock and key strategic features? What is the defined landscape character of the surrounding area? Are there any key views that should be preserved? Are there any green infrastructure features within the site and surroundings biodiversity assets and habitats? What is the structure and grain of development around the site? What is the scale and massing of buildings in the locality? What is the prevailing density of the surrounding area? What land uses are within the site and surrounding area? Are there any noteworthy elements of built form detail?	
B. Working with Site Features Are there any heritage asset features in or around the site? What is the topography across the site? Does the site include any water bodies, water courses, or is it adjacent to the River Thames? Does the site contain any physical constraints and how will these be accounted for as part of the potential development layout? Does the site include any existing publicly accessible open space? How does the site relate to any adjoining open space networks?	
C. Making Connections Does the local movement network provide opportunities to integrate development with its surroundings? What is the proposed site street hierarchy and how does it function? How can the movement network within the site encourage active lifestyles? What is the potential demand for car parking and how can this best be managed? Are public transport services available and how could they be	

Key Design Considerations	How Addressed?
accessed from and through the development?	
D. Building in Sustainability What are the micro-climatic conditions? Are there opportunities for local and sustainable energy generation? What is the scope for integrating SUDs into the site? Is provision made for wheeled bins, recycling and storage?	

4.0 PLACE TYPOLOGIES IN THURROCK

Identifying Place Typologies

4.1 From an understanding of different locations and places in Thurrock, as well as the types of development proposal likely to come forward within the borough, five broad 'place typologies' can be identified. Each is representative of typical locations within the borough, representing a mix of different land uses at different scales and intensities. They draw on the best examples in Thurrock as well as best practice examples from elsewhere.

4.2 The Place Typologies comprise:

One: Urban Centres and Transport Hubs

This typology encompasses town, neighbourhood and local centres and the built environment around the immediate edges of those centres. Urban centres will be characterised as mixed-use locations, the focus for retail, commercial, community and education uses, with good accessibility particularly by foot, cycle and public transport.

Locations that immediately adjoin the Urban Centres are also characterised as mixed-use locations but with secondary commercial, retail or community development together with a significant proportion of residential development, the proportion reflecting the status and size of the centre.

The typology also includes transport hubs within existing urban centres, around which more intensive forms of mixed-use development will be encouraged.

Two: Residential Neighbourhoods

This typology will form a substantial proportion of development coming forward within Thurrock. It comprises the bulk of residential-led development within which different character areas should be defined, depending on context. Residential Neighbourhoods can also include areas like mixed use neighbourhoods and local centres that would need to reflect guidance in Typology One.

Residential Neighbourhoods must provide a range of different housing reflecting local need, include a range of tenures and affordable homes, and be constructed at a range of densities depending on accessibility and location.

As a general rule, higher density development will be acceptable around locations with good public transport accessibility and a mix of commercial and

community uses close by, whilst lower density development will be appropriate to provide the interface between urban and rural locations.

Three: Commerce and Industry

This typology includes large-format retail and industrial facilities which are an important characteristic of Thurrock, particularly associated with the port activities at Tilbury, London Gateway and Purfleet. It also encompasses smaller-scale commercial and employment uses where these form part of a more comprehensive, residential-led mixed-use development.

Four: Thurrock Lakeside

As part of the broader Commerce and Industry typology, it is important to recognise the significance of Thurrock Lakeside as an economic driver and attractor within the borough. Specific guidance is highlighted for the Lakeside area.

Five: Village and Rural Locations

This typology captures the variety of villages, hamlets and single dwellings that exist outside the main urban areas in Thurrock. Many of the villages have historic cores and have experienced relatively modest expansion in recent years. Although the potential for change in village and rural locations is more limited, the ability to integrate development in a way that relates well to the character of these villages and the landscapes in which they sit will be an important consideration.

Applying the Place Typologies

4.3 The typologies are important to the design process as they are 'components' or building blocks representative of different land uses. They should be used as a tool for considering the design and layout of development proposals at all scales in differing locations. This could include:

- **Infill schemes within established locations, an existing town or local centre, residential street within an existing neighbourhood, or village envelope;**
- **Larger and more complex regeneration and development proposals where one or more of the typologies will be relevant;** and
- **Significant urban developments, where each of the typologies may form part of the overall design and layout within a comprehensive master-planned approach.**

4.4 The typologies must be considered in conjunction with the context appraisal as an integral part of the design process. The Design Guide provides guidance on key design and layout requirements for each with a particular

focus on development issues within the borough. Thurrock Council will expect proposals to be developed having careful regard to the requirements, demonstrating how the key design and layout requirements have been applied.

4.5 The key design requirements for each typology are strategic in nature, and structured to give high level guidance as part of the design process. Thurrock Council welcomes design innovation around the key requirements with the aim of maximising opportunities for outstanding new development to come forward in the borough.

Typology One: Urban Centres and Transport Hubs

4.6 Urban Centres, and the areas that edge onto them, are key locations within Thurrock. They provide a focus for a mix of different uses including commercial, retail, employment, community and civic functions, and also include residential development. They are also characterised by being highly accessible for a variety of modes including public transport. As such, the typology includes Transport Hubs, particularly where they are well related to existing urban centres.

4.7 Urban Centres will also include principal streets and public spaces as well as important notable buildings. This will traditionally have included churches, for example, but also includes other grand civic and commercial buildings that will often contribute significantly to the character and identity of a particular town, village or neighbourhood.

4.8 It is critical that Urban Centres are distinguished within the overall pattern of development in order to provide a clear hierarchy, ensuring that the legibility of existing and proposed places is maintained and enhanced, making them easy to navigate.

4.9 The transition between the Urban Centre and surrounding neighbourhoods is also an important consideration. Development around the edges of a town centre or large neighbourhood centre could include a larger proportion of other uses that complement the function of the centre as well as higher-density forms of residential development. Development around smaller neighbourhood or local centres might only contain a smaller proportion of other uses or be entirely residential in nature with higher density forms as appropriate.

4.10 Thurrock Council places a great deal of importance on ensuring that Urban Centres, including Transport Hubs, are well-designed, accessible mixed-use places that naturally form a focus for existing and future communities. This will apply to proposals coming forward within established town and neighbourhood locations as well as the design and layout of new town, neighbourhood and local centres.

Key Design Requirements

1. Thurrock Council will require mixed-use facilities that generate the highest levels of activity to be located in the most accessible locations. This will typically be on the primary street network and - particularly - streets that are well served by public transport services.

2. Proposals for Urban Centres must form part of the overall hierarchy of centres across the borough. On major development sites, a number of

neighbourhood and local centres will be required to serve the needs of the development and adjoining communities.

3. Attractive, clearly defined and convenient links between new and existing mixed-use centres, edge of centre locations and residential neighbourhoods must be provided in order to make them easy to access. Linkages must be designed to encourage walking and cycling using lighting, signage, layout, and passive surveillance from adjoining development.

4. Urban Centres at all scales must provide for the co-location of different land uses to form mixed-use 'hubs'. This can be achieved by clustering community, education, small-scale employment and commercial uses together in a single, accessible location. Co-location of different uses can help support the function of the Urban Centre by encouraging linked trips. This also has the benefit of providing a focus for new and existing communities.

5. Thurrock Council will expect vertical mixed use development to be incorporated into Urban Centres providing alternative ground floor uses below upper floors of residential development. Ground level floor-to-ceiling heights should be capable of accommodating a range of uses including retail. In these locations there may be opportunities for taller buildings subject to a wider consideration of site context. Such proposals will be considered on their own merits having regard to the advice on tall buildings at point 11 below.

6. Key facilities including retail units, schools, community buildings and other uses must be carefully integrated as part of the overall design of the centre with main frontages that clearly address principal streets and key spaces. Car parking must be discreetly accommodated away from the street scene or as part of a well-designed focal square or space. Servicing access must be away from principal areas of public realm and well screened.

7. Principal streets and key spaces must be well-overlooked by the main frontages and entrance points of principal land uses that generate activity.

8. Thurrock Council will expect a focal point to be provided as part of the design and layout of Urban Centres of a scale appropriate to that centre. This should comprise a 'high street', square, park or garden around which all principal land uses are grouped.

9. It will be appropriate to consider the character of established town centres within the borough to identify design references that can influence the design of local and neighbourhood centres. This will provide a

contemporary interpretation of existing mixed-use environments that are locally distinctive and 'of their time'.

10. Within Urban Centres, proposals for small residential infill development must pay careful regard to context, but Thurrock Council will also encourage more innovative and contemporary architectural styles and layouts in order to demonstrate how places develop over time.

11. Tall buildings are not a common feature of existing Urban Centres in Thurrock. Where proposals come forward they must be focused in the largest centres in the borough where these are highly accessible by a variety of modes. Thurrock Council will assess proposals on their merits having particular regard to accommodating parking and servicing requirements, pedestrian entrances, the mix of ground floor uses and their relationship with the public realm; issues of daylight, sunlight and overshadowing; and wind and microclimate around the base of the building. Reference will be made to the Historic England Advice Note 4 'Tall Buildings' (December 2015) and any subsequent guidance.

12. The treatment of boundaries and edges of development in Urban Centres must carefully relate to the public realm both visually and functionally. Blank walls or elevations and extensive use of fences will not be appropriate or acceptable design responses. Security measures must be carefully integrated into the design and landscape layout to be functional without being visually intrusive. The design of boundary treatments should allow for future growth including reconfiguration to increase connectivity where required.

13. The **frontages** of the development (buildings and landscape) which border the public realm serving a transport hub should join seamlessly with it. The highest design standards should be applied to the primary frontages that define the public realm outside the hub.

14. Higher **density** and more compact development forms will be encouraged to support transport services. Appropriate design strategies should be used to **mitigate the noise, lack of privacy** and other challenges associated with proximity to transport hubs.

15. Large-scale developments near transport hubs should pay special attention to the **permeabilit**y and **walkability** in the site layout in order to maximize the advantage of the adjacency to transport facilities. If there are opportunities to create direct pedestrian routes through the development to the transport hubs or town centre destinations, these will be encouraged.

16. If the edge of the development fringes the primary route to the transport hub, alternative **security measures** should be implemented so inactive

features such as long fences/blank walls do not dominate the public realm.

Typology Two: Residential Neighbourhoods

4.11 Residential Neighbourhoods are a key typology, and will continue to represent the most substantial development opportunity within Thurrock. Creating attractive, healthy, safe and sustainable places for existing and future residents to live is a key priority for Thurrock Council.

4.12 Within the borough, Residential Neighbourhoods encompass a significant proportion of the existing housing stock, much of which was constructed inter-War and post-War. It provides a mix of residential development and other facilities but in places lacks a strong place identity, including the use of standard house types and cul-de-sac layouts that are not particular to Thurrock.

4.13 Thurrock Council wishes to raise the quality and design standards of proposed residential neighbourhoods within borough, be that infill development or more comprehensive development proposals - a major urban extension, for example. The Design Guide will be an important part of achieving this aim.

4.14 In assessing proposals for new residential neighbourhoods at all scales, Thurrock Council will expect to see how the design proposals have responded to context and how the key considerations set out in Section 3 of this guide have been taken into account.

Key Design Requirements

1. A clear hierarchy of streets and spaces integrated with a robust landscape framework must form part of the basic layout of Residential Neighbourhoods. Thurrock Council will require proposed development to have a permeable layout and integrate with existing development through providing connections to existing local roads, footpaths and open space networks.

2. Development proposals that adjoin existing streets and spaces must positively address and front onto them. The relationship of new developments with existing highways must be appropriate to their role in terms of ‘movement’ and ‘place’.

3. Proximity to substantial rail and road infrastructure is a critical part of the design and layout of development as part of a residential neighbourhood. Thurrock Council will require design measures necessary to mitigate any adverse impacts arising from noise, air quality and visual amenity. These will include the positioning of habitable rooms relative to infrastructure, location of sensitive land uses within the site, and physical measures such as landscape bunds or acoustic fences.

4. Existing green infrastructure assets must be integrated into a landscape framework. Streets and squares will have a role as part of the landscape framework which will include opportunities for multi-purpose spaces that are well-overlooked by new residential development.

5. Thurrock Council will expect proposals for larger residential developments to incorporate a number of character areas differentiating one location from another. This can be achieved through different densities depending on context or location relative to an Urban Centre, for example, or rural edges. The number of character areas will depend on context and the size of the scheme being proposed.

6. Where smaller scale residential neighbourhoods are proposed which do not require the inclusion of a new local or neighbourhood centre, Thurrock Council will expect the design and layout to enable access to existing facilities. This will help integrate development with its surroundings.

7. Consideration must be given to the character of the most positive residential areas within the borough to identify references that can influence the design of new residential development. A contemporary interpretation of the local vernacular styles can create developments that generate a more unique sense of place.

Typology Three: Commerce and Industry

4.15 One of the most striking and defining characteristics of Thurrock is the historic relationship between the borough and the River Thames. This has resulted in a legacy of significant commerce and industrial land uses, infrastructure and associated structures, many of which are monolithic in scale and therefore highly visible.

4.16 Ports at Tilbury, London Gateway and Purfleet are a focus for commerce, employment and activity, with cranes, silos and vessels providing imposing features within the landscape. Associated warehouses, refineries and industrial complexes, and administrative blocks are also part of the overall pattern of development associated with the typology.

4.17 The ports, bridges and intersections are also gateways into the Thurrock. Although some, notably The QE2 Bridge, are significant landmarks, others, particularly major motorway and trunk road intersections and junctions, have little to recommend them in terms of design and appearance as major points of arrival.

4.18 Given the prominence and economic importance of these land uses and structures - and the significant potential for expansion - Thurrock Council is keen to ensure that consideration is given to the design, layout and appearance of developments. This is particularly important around gateways in order to communicate a positive impression upon arrival into Thurrock.

Key Design Requirements

1. Thurrock Council will expect proposals to demonstrate how issues of grouping and massing have been considered as part of the design process within the context of the wider landscape. Views towards new developments, particularly those that will be prominent features within the landscape, will need to be fully assessed with consideration given to the need for a visual impact assessment.

2. For large scale storage, distribution and warehouse schemes, Thurrock Council will require design interventions including the use of coloured cladding, substantial landscape planting, layout and grouping to be employed in order to break up the potential bulk and massing of proposed buildings.

3. At riverside and port facilities, use of colour, repetition in the design and appearance of large scale plant and machinery, and grouping of open air storage can mitigate the massive scale of such facilities. Thurrock Council will expect proposals to carefully consider how facilities can be simplified ensuring that only the minimum development is proposed in order to ensure operational requirements are met.

4. Where major development proposals come forward adjoining key gateways including major roads, Thurrock Council will require particular attention to be paid to the design of key elevations addressing the gateway together with a comprehensive hard and soft landscape strategy to ensure a positive environment is created.

5. Within commercial, employment and industrial development, opportunities to group entrance points as well as supporting facilities around a focal point or 'hub' must be considered. Here mixed-use facilities to support the working population can be provided together with public transport stops and other shared uses.

6. A hierarchy of streets and spaces must be included as part of the layout of new development, making effective linkages to adjoining areas where necessary and providing a structure around which large scale proposals can come forward.

7. Extensive use of hard and soft landscaping and tree planting must be included as an integral part of new proposals in order to break up the scale of multiple or groups of commercial and industrial buildings as well as providing a robust visual framework.

8. Care must be taken when designing hard and soft landscape features to account for the prevailing character of the area – this is particularly important in locations near the Thames where marshland and grasslands predominate.

9. Boundary treatments and security features must also be designed to have a minimal visual impact whilst remaining effective.

10. Proposals must consider how plant equipment, areas for machinery and lighting are integrated into the design from the outset to form a 'composition' of elements.

Typology Four: Thurrock Lakeside

4.19 A further significant location is the mixed commercial, retail parks and shopping centre at Thurrock Lakeside, focused around Alexandra Lake and adjoining junction 30 the M25. Intu Lakeside is a regional shopping centre attracting on average around 500,000 visitors per week. Thurrock Council recognise the economic significance of the Lakeside area which has substantial growth and development potential.

Key Design Requirements

1. Development at Lakeside must contribute to achieving a mix of uses that is appropriate to a strategic commercial and retail centre.

2. Proposals must enhance the sense of place, focusing on key streets and spaces including Alexandra Lake through the positioning of active ground floor uses and entrances.

3. The public realm must be of a high quality to improve the overall character and appearance of Thurrock Lakeside and establish a cohesive and unified appearance.

4. Selective redevelopment will be encouraged in order to promote a finer grain of development in Lakeside whilst supporting the economic and commercial character of the area.

5. Car parking should be designed to make efficient use of available land, with surface parking complemented by multi-storey structures which are sleeved by single aspect development. This will promote a wider mix of uses and increase development density.

6. Public transport gateways for bus and rail must be fully integrated, providing attractive, safe and convenient onward pedestrian linkages to key locations.

Typology Five: Village and Rural Locations

4.20 The villages and rural locations within the borough have strong identities and contribute much to the overall character of Thurrock. Traditional Village Centres can be important focal points for the community including a mix of uses. They can also contain landmark and historic buildings, often at the convergence of key, historic routes.

4.21 Proposals coming forward within these locations are likely to be more limited to include small scale infill and redevelopment proposals within the defined development boundaries of existing settlements.

Key Design Requirements

1. With infill sites, new development must be able to relate successfully to the existing grain and reflect patterns and rhythms, considering, where relevant, building lines, set-backs and spacing's.

2. Development layouts will be expected to be formed to a pattern, character and appearance that is well related to the existing settlement. Design references in terms of the relationship between uses and spaces and the treatment of the public realm are key considerations.

3. A contemporary interpretation of character is encouraged to create successful designs that are locally distinctive but 'of their time'. For example, the use of mews style developments close to established village centres could be a way of increasing density without impact on the rural character of the area.

4. Self-build development plots will be governed by a robust design framework or design code establishing broad parameters within which individual design responses can be drawn up. The framework or code must be robustly informed by the design context of the wider settlement.

5. Residential streets and access to individual plots / dwellings must be sensitively designed with an emphasis on place to prevent highway design standards undermining local development character.

6. New development edges addressing the countryside must be laid out to include generous landscaping to create a development that is appropriate to the settlement and the character of the rural landscape.

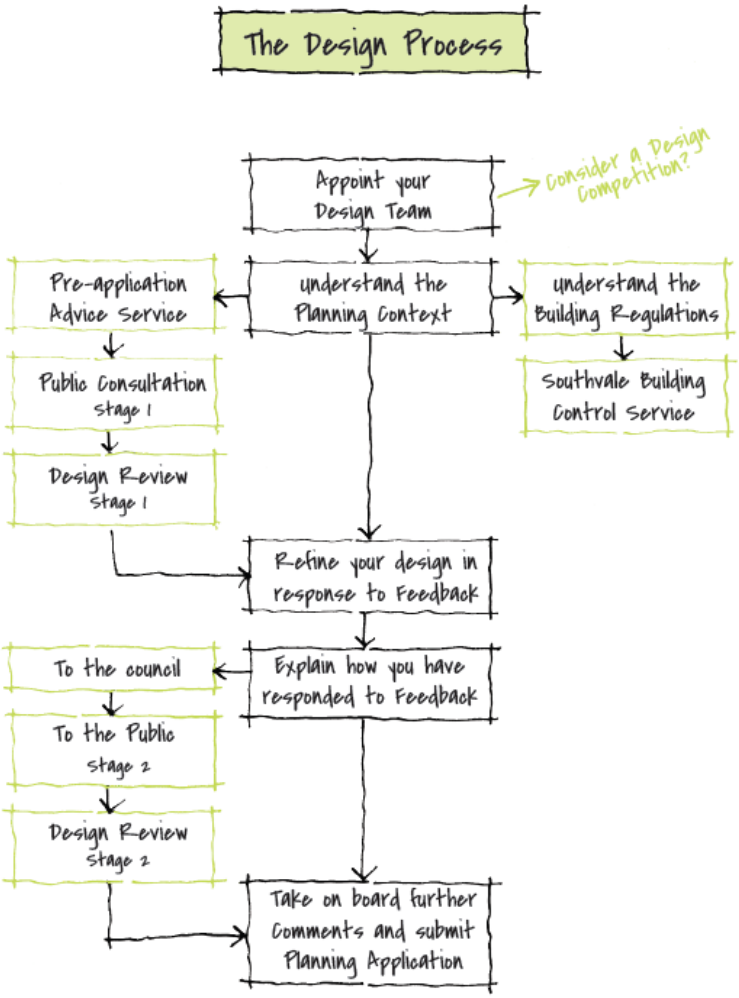
7. The site boundary should be sensitive to the surrounding landscape. The boundary and edge of the development should feel a part of the rural setting. Lower density development that fronts onto the surrounding landscape and features appropriate planting will be expected. Close-

boarded fences, exposed rear elevations and blank flank walls will not be acceptable design responses.

5.0 THE DESIGN PROCESS

5.1 Good design is an integral part of the development process and must be considered from the outset to ensure a positive outcome. Figure 1 illustrates the design process which we would strongly encourage all applicants to follow to ensure that the final design it fit for purpose.

<INSERT DESIGN PROCESS DIAGRAM – SIMILAR TO THE EXAMPLE BELOW>



INFORMATION BOX: Designing new developments is a collaborative process involving a range of disciplines. In working up a successful scheme there is a need to pull together a design team that cover a range of skills and ideas. Design teams can include the following roles:

- Developer/Agent
- Architect
- Town Planner

- Urban Designer
- Landscape Architect
- Heritage Expert
- Highway Engineer
- Sustainability Expert
- Development Economics Expert

This list is not exhaustive and the level of input will need to be proportionate to the scale and type of development and site context.

Pre-Application Advice Service

5.2 Applicants are encouraged to consult with Thurrock Council at the earliest opportunity.

5.3 Pre-application discussions provide the applicant the opportunity to understand Thurrock Council's expectations and tackle key design issues. It also provides an opportunity for applicants to set out their objectives and aspirations for a proposed development. Early discussions about the design of a development is more efficient than trying to incorporate revisions at a later stage, particularly with larger proposals where necessary changes may become significant. Thurrock Council offers a pre-application service that takes a multi-disciplinary approach in advising on the design quality of emerging proposals.

5.4 Large scale strategic developments may require a number of meetings and the sharing of extensive information. In these circumstances, Thurrock Council will expect developers to enter into a Planning Performance Agreement that will set out fees and other arrangements as necessary.

Design Review

5.5 The Design Review process is a well-established way of improving design quality and is recognised through the National Planning Policy Framework as a key tool for delivering good quality developments. Design Review is an independent and impartial process for evaluating the quality of major developments. The aim is to ensure the highest quality design solution.

5.6 The Design Review process is particularly encouraged for development projects that have the potential to play a significant role in contributing to the development and regeneration of Thurrock. Schemes can be reviewed at any stage in the planning process but the ideal time for review is before a planning application has been submitted. More information on the Design Review process

Supporting Material

5.7 The Council's Validation Checklist provides a starting point, setting out the details that will be required as part of a planning application. Pre-application discussions will also identify any additional material that will be required to support formal planning applications.

5.8 The Council will also require Design and Access Statements to support major development proposals or smaller developments in or near heritage assets. Design and Access Statements will be required to:

- Explain the principles and concepts that have been applied to the proposed development
- Demonstrate the steps taken to appraise the context of the proposed development and how the design of the development takes that context into account
- Explain the approach to access
- Set out how relevant Local Plan policies and guidance, including this Design Guide, have been taken into account.

5.9 Further guidance for preparing Design and Access Statement is offered by Design Council CABE in "Design and Access Statements: How to write, read and use them" (CABE, 2006). For major development proposals, applicants will be expected to demonstrate that a comprehensive master-planning process has been undertaken.

5.10 For outline proposals, Thurrock Council will expect applicants to submit sufficient information to show the proposed development extent, land uses, scale and heights of buildings, access plots, provide an indicative layout of development and where appropriate indicative floor plans and elevations. Further information with regard to movement, density, streetscapes, open space, and landscaping and appearance will be encouraged to provide guidance to developers wishing to bring forward detailed schemes. For larger schemes, design codes may be requested to reinforce key design requirements for subsequent reserved matters proposals.

5.11 For reserved matters proposals, applicants will also be expected to provide further details relating to layout, scale, access, movement, open spaces, landscaping and appearance, including building materials, streetscapes and boundary treatments.

Post Application, Conditions and Monitoring

5.12 When development proposals are granted planning permission, Thurrock Council will use appropriate planning conditions to ensure that the design quality of development is achieved.

5.13 For outline proposals, Thurrock Council will seek to agree certain development 'fixes' which may take the form of a development framework or

a more comprehensive master plan. In this context, a condition will require subsequent reserved matters proposals to relate to key master planning design principles and parameter drawings.

5.14 There will also be circumstances, particularly for large sites where Thurrock Council will, through an appropriate condition, require further details to be submitted in the form of a design code to provide greater control of the design quality of reserved matters applications. Design codes are important for expressing the design requirements of development frameworks and master plans in greater detail, especially for sites that are likely to be delivered by more than one developer over a long timescale.

5.15 For detailed applications, conditions will require further details to ensure a quality outcome on aspects such as materials and landscape specifications.

5.16 Thurrock Council will resist subsequent proposals for minor amendments or to vary extant permissions or conditions that are likely to undermine their design quality.

5.17 Thurrock Council will also ensure that the design quality of schemes is met by monitoring the compliance of development with approved plans, conditions and details. Monitoring of developments will also provide valuable feedback on the quality of new developments across the borough.

GLOSSARY

Accessibility
The ease with which a building, place or facility can be reached by people and/or goods and services. Accessibility can be shown on a plan or described in terms of pedestrian and vehicle movements, walking distance from public transport, travel time or population distribution.

Adaptability
The ability of a building or space to be changed in response to changing social, economic and technological conditions.

Amenity
Relates to the immediate environment around new development. Safeguarding residential amenity means that existing levels of privacy, degrees of overlooking, and quality of environment are not compromised by adjacent or surrounding development.

Building Line
The extent of the built component of a development (external walls/arcades). Usually refers to the front elevation of a building.

Built Form
The shape of developments including buildings and other structures, not only individually but as a collective.

Continuity of Street Frontages
Refers to the use of continuous or "joined up" building frontages and built forms to reinforce the perceived degree of enclosure. This can be achieved by the use of buildings, boundary treatments (e.g. walls/fences/ railings) or landscaping.

Connectivity
The degree to which a place, street or series of buildings is connected to its surroundings. Connections may be visual or physical, and usually relate to sight lines or movement (vehicular/cycle/pedestrian).

Context
The setting of a site or area.

Context Appraisal
A detailed analysis of the features of a site or area (including land uses, built and natural environment, and social and physical characteristics) which serves as the basis for an urban design framework, development brief, design guide, or other policy or guidance.

Cul De Sac

A street closed at one end, often having a curvilinear form where the closed end of the street is not visible from the junction.

Density
A measure of the average number of persons, households or units of accommodation per area of land.

Design Code
A document providing detailed guidance on aspects of design to which developers of individual parts of the site will be expected to adhere. Guidance is usually provided on highway design, open space, public realm and landscape design, and the layout of new housing/employment development. Guidance on architectural detailing and materials is sometimes also provided. It typically includes details of dimensions and street cross-sections.

Design Guidance
A generic term for documents providing guidance on how development can be carried out in accordance with the planning and design policies of a local authority or other organisation.

Design Reference
Refers to a built or natural feature (existing or proposed) which, by virtue of its location or prominence, is a reference point which should govern the design of subsequent development.

Design Principle
An expression of one of the basic design ideas at the heart of an urban design framework, design guide, development brief or design code. Each such planning tool should have its own set of design principles.

Design Standards
Produced by districts and unitary authorities, usually to quantify measures of health and safety in residential areas.

Enclosure
The use of buildings to create a sense of defined space. Enclosure is achieved where the buildings form a strong continuous edge and where the ratio of the width of the space or street to the height of the buildings enclosing it is sufficient for the observer to feel that they are in an enclosed rather than an open space.

Façade
The face of a building, especially its principal front.

Figure Ground
A plan showing the relationship between built form and publicly accessible space (including streets and the interiors of public buildings such as churches) by

presenting the former in black and the latter as a white background, or the other way round.

Frontage
That part of a building/group of buildings which significantly contributes to the character of an area and defines the street.

Gateway
Refers to a point on a key route which creates a sense of arrival, often through the enclosure of existing buildings, or through techniques such as changes in surfacing or tree planting.

Grain
The pattern of the arrangement and size of buildings and their plots in a settlement; and the degree to which an area's pattern of street-blocks and street junctions is respectively small and frequent, or large and infrequent.

Landmark
A memorable building or structure which stands out from its background by virtue of its height, size or some other aspect of design. Often significantly contributes to the character of an area. Landmarks are often used as orientation points within the local environment and aid legibility (see below).

Landscape
The appearance of land, including its shape, form, colours and elements, the way these (including those of streets) components combine in a way that is distinctive to particular localities, the way they are perceived, and an area's cultural and historical associations.

Landscaping
Refers to the use of materials for landscaping purposes. Usually incorporates the use of paving, street furniture, public art, trees, shrubs, and water features.

Legibility
The degree to which a place (its structure, form and function) can be easily understood and communicated.

Massing
The combined effect of the arrangement, volume and shape of a building or group of buildings. This is also called bulk.

Master Plan
A plan or illustration which sets out the overall structure or layout of new development. Often used to convey a development concept or image of the development rather than specify elements of detailed design.

Mixed-Use Development

Development which encompasses a variety of different land uses within close proximity. Can refer to adjacent buildings which accommodate different land uses, or different land uses which are accommodated within a single building or group of buildings.

On-Plot
Refers to activities located within the curtilage of a building, usually in private ownership (e.g. on-plot parking, on-plot landscaping).

On-Street
Refers to activities located within the public highway, usually in public ownership (e.g. on-street parking).

Open Space and Green Space
Refers to locations that that can used for a multiplicity of functions including formal and informal recreation, community focal points, biodiversity and nature conservation.

Permeability
The degree to which an area has a variety of pleasant, convenient and safe routes through it.

Primary Street/Avenue
A street which by its design can be identified as the most important and connected route through an area. Often accommodating public transport, street planting and higher levels of public activity, primary streets can define and contribute greatly to the character of an area.

Public Realm
Streets and spaces available for use by everyone without charge - shaped by buildings, landscaping, structures and activities alongside or within them.

Secondary Street
A street which by its design can be identified as a lower key route than the primary street (see above), whilst still providing important connections through the development. Secondary streets have lower levels of public activity, and tend to provide a second (alternative) route between destinations. Secondary streets can also contribute greatly to the character of an area, particularly in creating a sense of enclosure and human scale.

Sense of Place
A person's perception of a location's indigenous characteristics, based on the mix of uses, appearance and context which makes a place memorable.

Settlement Pattern
The distinctive way that the roads, paths and buildings are laid out in a particular place.

Scale
The size of a building in relation to its surroundings, or the size of parts of a building or its details, particularly in relation to the size of a person.

Shared Surface
These are streets within which a single surface treatment is employed. Vehicular movement, parking and pedestrian areas are integrated with no segregation of movement/space.

Street Furniture
Objects desired or required as part of the laying out of a street. Includes seating, lighting, bins, cycle storage, signage, boundary treatments and planters). Street furniture can also incorporate public art.

Streetscape
The term used to describe the visual impact and composition of a street, usually comprising building frontages, boundary treatments, spaces, views and vistas, landscaping, street furniture and materials.

Storey Height
Can be expressed as the number of floors of a building (e.g. 3 storey), or as a specific measurement (e.g. storey height equating to a minimum of 7.5 metres façade height). Specifying minimum storey height can assist in creating a sense of enclosure.

Topography
The arrangement of the natural and artificial physical features of an area.

View
The direct, prominent and unobstructed lines of sight within the public realm visible from a particular point and contributing to the legibility of the area.

Vista
An enclosed/framed view.

SAMPLE OF PROPOSED LAYOUT STYLE

3.47 In design terms all streets must be fronted by development, with principal entrances, doors and windows addressed the public realm. This provides a sense of enclosure as well as opportunities for passive surveillance.

3.48 Thurrock Council will also require street trees to be incorporated as part of the hierarchy of streets in all developments. Street trees already contribute significantly to the character and identity of different locations in Thurrock. Elements of on-street parking should also be accommodated as part of the street network.

3.49 The hierarchy of streets is not meant to be rigidly applied and does not necessarily mean that it is always more important to provide for pedestrians than it is for other modes. However, they should at least be considered first ensuring that the street will serve all of its users in a balanced way.

3.50 Primary streets form the main points of access capable of integrating public transport routes and also providing an attractive environment for pedestrian and cyclists. Primary streets should be defined by development that is greater in form, scale and density with a focal points for schools, shops and community facilities.

3.51 Secondary streets will generally be narrower, with clear residential frontages. The street should be designed with alignments, building lines or other public realm features that establish a traffic calmed environment. Junctions with primary streets must be emphasised through provision of a building corner, differentiated public realm, and tree planting. This aids legibility by highlighting the change from one type of street to another.

3.52 Tertiary streets will comprise a variety of lanes, mews, and courts providing local connections between secondary streets. This contributes towards the overall permeability of the development. Shared surfaces could be incorporated together with home zones.

Secondary street with parking, Purfleet

Defined corner at junction of streets, Grays

'The Avenues' provide exemplar residential streets, Grays

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Shared surface tertiary street, Grays

On-street parking provision overlooked by houses, Purfleet

Parking square defined by street trees, Purfleet

C3) Promotes active and healthy lifestyles and public transport

3.53 Streets that are well connected to existing movement networks, public transport services and local facilities have the potential to increase travel choice. They can in turn make walking and cycling more attractive as a mode of choice for local journeys or simply for recreation and therefore encourage "active travel". Local connections to existing schools or for new education facilities in the new development in particular will offer the opportunities for walking to school.

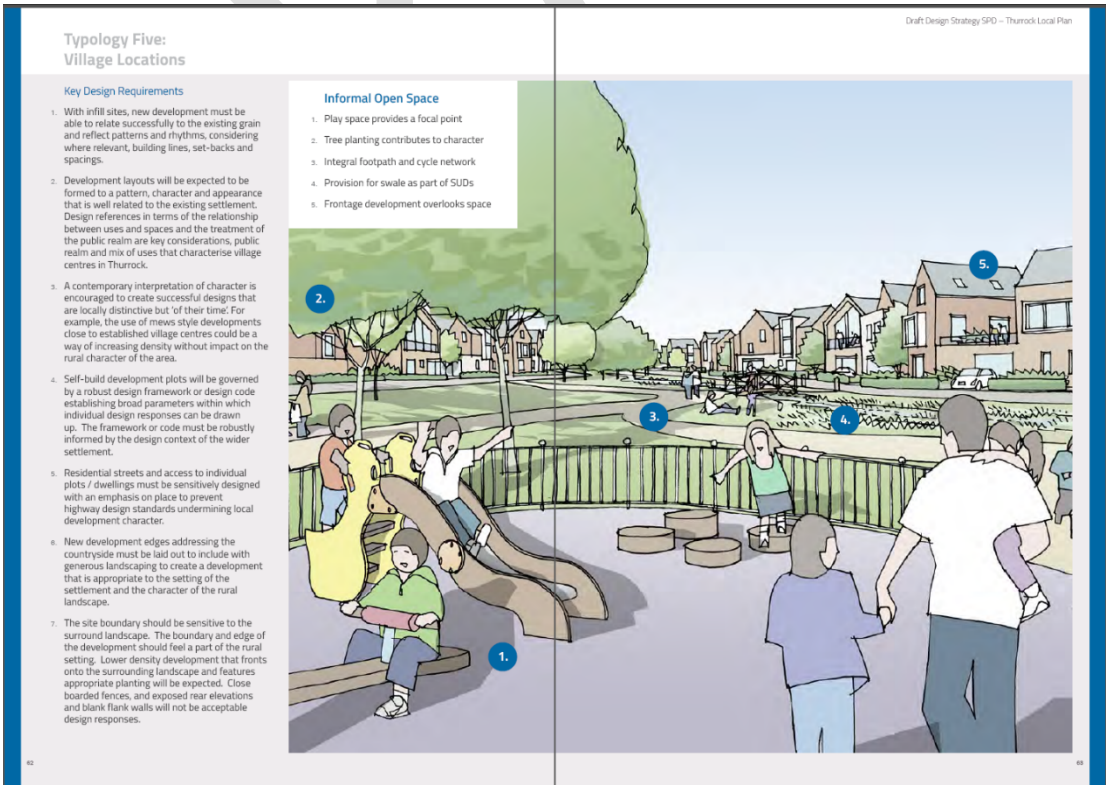
3.54 Integrating walking and cycling routes with a network of open spaces, green corridors and recreational routes within and outside developments will also promote active recreational lifestyles including walking and cycling for leisure and sport activities and play. Reference should be made to Sport England and Public Health England publication '**Active Design**' (2015) and CABE Design Council '**Active by Design**' (2014). The TCPA publication '**Planning Healthy Weight Environments**' (December 2014) also provides useful guidance.

C4) Integrates car parking and provides for cycle parking

3.55 Parking is a critical design consideration. Adequate space must be provided to serve the proposed development, assessed within the context of proximity to public transport. A mix of both on-street and on-plot car parking should be provided, with designs allowing for discrete groups to reduce overall visual impact within the street-scene.

3.56 Tree and landscape planting should be provided to further reduce visual impact particularly for on-street parking provision or where substantial areas of car parking are required for a particular use or mix of uses.

3.57 Provision should also be made for cycle parking and storage, together with an allowance for electric charging points.



Typology Five:
Village Locations

Key Design Requirements

1. With infill sites, new development must be able to relate successfully to the existing grain and reflect patterns and rhythms, considering where relevant, building lines, set-backs and spacings.
2. Development layouts will be expected to be formed to a pattern, character and appearance that is well related to the existing settlement. Design references in terms of the relationship between uses and spaces and the treatment of the public realm are key considerations, public realm and mix of uses that characterise village centres in Thurrock.
3. A contemporary interpretation of character is encouraged to create successful designs that are locally distinctive but 'of their time'. For example, the use of mews style developments close to established village centres could be a way of increasing density without impact on the rural character of the area.
4. Self-build development plots will be governed by a robust design framework or design code establishing broad parameters within which individual design responses can be drawn up. The framework or code must be robustly informed by the design context of the wider settlement.
5. Residential streets and access to individual plots / dwellings must be sensitively designed with an emphasis on place to prevent highway design standards undermining local development character.
6. New development edges addressing the countryside must be laid out to include with generous landscaping to create a development that is appropriate to the setting of the settlement and the character of the rural landscape.
7. The site boundary should be sensitive to the surround landscape. The boundary and edge of the development should feel a part of the rural setting. Lower density development that fronts onto the surrounding landscape and features appropriate planting will be expected. Close boarded fences, and exposed rear elevations and blank flank walls will not be acceptable design responses.

Informal Open Space

1. Play space provides a focal point
2. Tree planting contributes to character
3. Integral footpath and cycle network
4. Provision for swale as part of SUDs
5. Frontage development overlooks space

1.
2.
3.
4.
5.

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