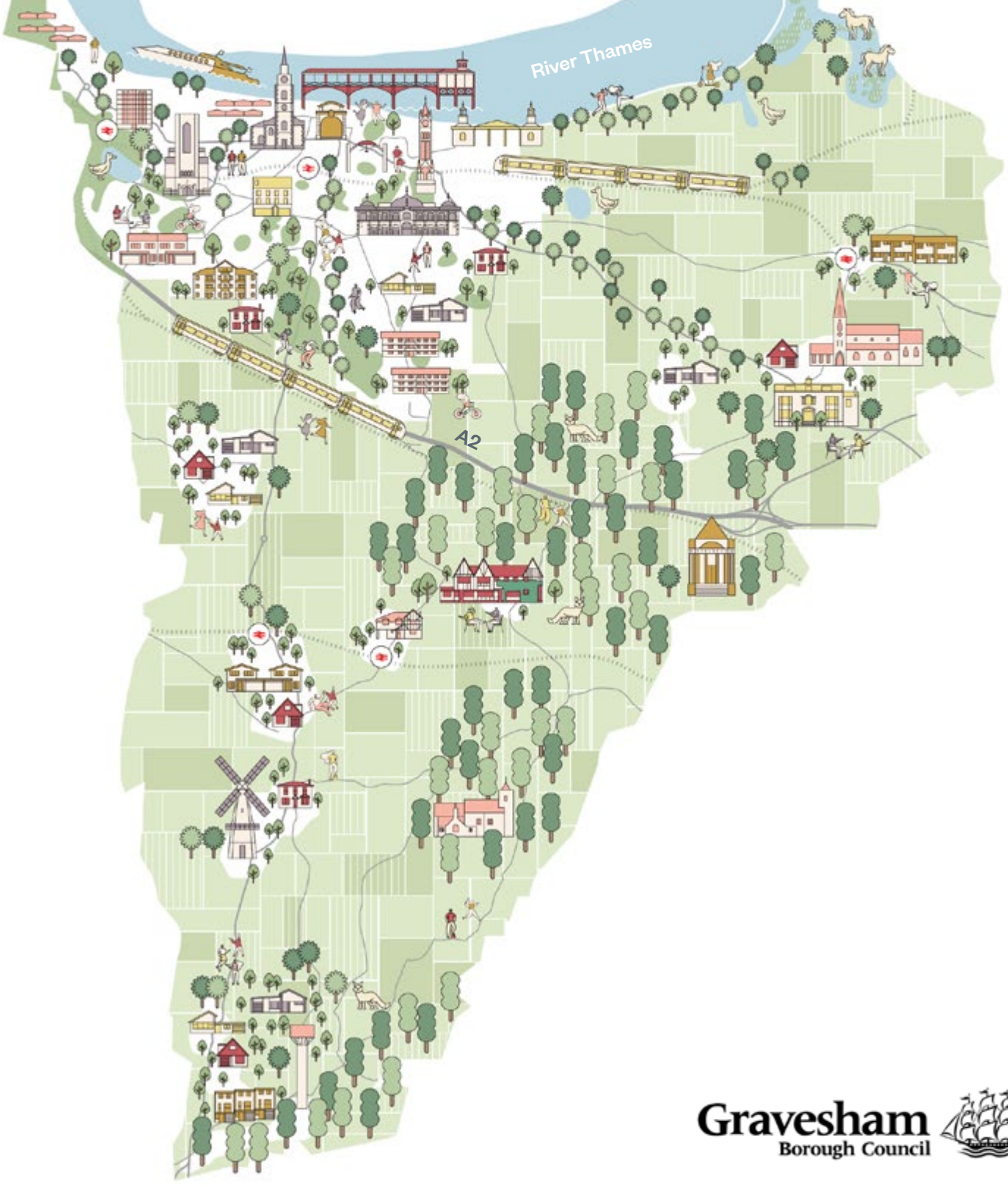
DESIGN FOR GRAVESHAM

Design Code

Supplementary Planning Document

May 2024



Gravesham Borough Council

Foreword

It gives me great pleasure to introduce the borough's design code, Design for Gravesham.

This code is a once in a decade strategic plan to steward community and place led regeneration in the borough for the decades to come. It provides long-term strategic direction to support the council's Corporate Plan and Climate Strategy and has been developed in consultation with the community and stakeholders at every stage.

Gravesham has been described by others as 'Kent's best kept secret' and 'a sleeping giant.' Gravesham's excellent transport links to London, the estuary and the southeast support the fact that Gravesham is a prime location for investment. A key vision objective of the Corporate Plan is to develop a Vibrant Gravesham: working with partners to secure a holistic programme of strategic regeneration and critical infrastructure that enhances quality of life, promotes civic pride, and acts as a catalyst for economic development.

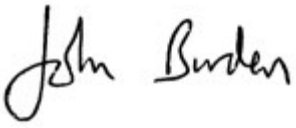
Over recent years, catalytic regeneration activity on Gravesham Riverside has intensified with projects in development, delivery and the pipeline.

This code is part of stewarding and unlocking this potential - while responding to the borough's unique places, its historic towns and characterful villages, supporting quality regeneration and development that delivers holistic benefits for Gravesham; not just homes but employment and skills opportunities, better river access, enhanced public realm and green spaces.

Gravesham is a unique place but is in much need of Levelling-Up, with areas of the borough facing significant social-economic and health inequalities. These inequalities are amplified by the current cost of living crisis and Wards in our borough are amongst the most deprived in the country. This code is part of working together with stakeholders, from government agencies to development promoters, to deliver a rich mix of opportunities and holistic benefits for Gravesham – creating a great place to live, work and visit.

Design for Gravesham recognises the past and present of this great borough and signposts a

future where quality regeneration and development supports better quality of life, promotes civic pride, and acts as a catalyst for economic development - stewarding and unlocking Gravesham's unique potential in the years to come.



Cllr John Burden

Leader of the Council

Foreword

Welcome to Gravesham Borough Council's Design Code on behalf of the residents, businesses and visitors of the Borough.

It is my pleasure to introduce this Design Code - Design for Gravesham – which is a once in a decade opportunity to ensure that our Borough, with the River Thames at its heart, our towns of Gravesend and Northfleet and our villages, Meopham, Cobham, Shorne, Higham, Istead Rise, Sole Street Luddesdown and Vigo and the surrounding areas which have rich and unique identities, are protected and enhanced. Gravesham is the home of Dickens and has some of the finest open spaces, areas of natural beauty and idyllic villages in all of Kent. The area has an enduring industrial heritage such as paper and cement which has shaped our people. There are modern High Street challenges in line with much of UK society with online and cost of living challenges prompting the need to re-think towns that were once local retail centres. Gravesham has excellent river, rail and road links and is a prime location for investment.

Our Borough is shaped by this history and heritage, and through this design code process a strong vision and codified direction has been created by listening to local residents, businesses and visitors and it is their views that Gravesham is maintained and enhanced by stewarding a culture for community and place led regeneration in the Borough, and that plans and designs in turn respond to these needs of our unique and super diverse community and unique local identities and neighbourhoods.

Design for Gravesham sets the standard for quality buildings, places and neighbourhoods that will stand the test of time. As a listening council and following the council's Community Engagement Strategy, Design for Gravesham has been developed through meaningful engagement at every stage of the development of the code. The voice of the community is the golden thread throughout this document. We strongly urge those that wish to bring forward plans in Gravesham to take a community first approach – respect, listen, engage and empower.

This document is a Supplementary Planning Document (SPD) and therefore is a material consideration in decision making. For those that seek to develop in our Borough, we have listened to our residents, our businesses and our visitors and while this design code is not designed to be punitive, we need to highlight that it is not an optional consideration or inconvenience, it must be at the core of your thinking, your designs and your implementation. We will not hesitate to use our full Planning Enforcement powers for those who seek to circumvent this design guide as part of the implementation of planning permission.

I would like to thank all those that have contributed to the creation of this SPD design code including the team at Levitt Bernstein, our excellent Gravesham Borough Council Officers who have steered this document through, my Councillor colleagues who have contributed and most importantly those residents, businesses and visitors who have helped co-produce this design guide at every stage.

Cllr Shane Mochrie-Cox

Deputy Leader of the Council and Cabinet Member for Strategic Environment

Design for Gravesham has been developed through three stages of extensive engagement with the **Gravesham community.**

This design code is for Gravesham; an incredible borough of historic towns, characterful villages and neighbourhoods.

It is a strategic document that sets out **Gravesham's vision** and expectation for quality place-making and early engagement with planning officers, when developing regeneration and development proposals in the borough.

Gravesham is a proud and unique borough. While images in this code have been taken from regional, national and even international precedents to demonstrate design principles, the expectation is for developers and those involved in the delivery of regeneration and development in the borough, to respond to **Gravesham's unique past and present and deliver a future of sustainable, place-led development with people at its heart.**

Contents

This document has been prepared on behalf of Gravesham Borough Council by Levitt Bernstein in collaboration with Urban Flow and Built-ID.

With thanks to the sounding board:

Cllr Shane Mochrie-Cox
Deputy Leader of the Council;

Tom Reynolds
Assistant Director (Inclusive Growth);

Andy Von Bradsky
Dip Arch RIBA FRSA, Director of von Bradsky Enterprises.

Further thanks to all who participated within the consultation conversations, in particular the Council's Planning Team and Gravesham residents with their invaluable feedback and knowledge of the Borough.

Fig 1 High Street, Gravesend

“Shorne Woods, Jeskyns, Cobham are all valuable places I am fond of.”

Resident’s comment

1 Introduction

1
Introduction

1.1 Welcome to Gravesham

Gravesham is a collection of diverse towns and villages, each one with its own unique character and local identity.

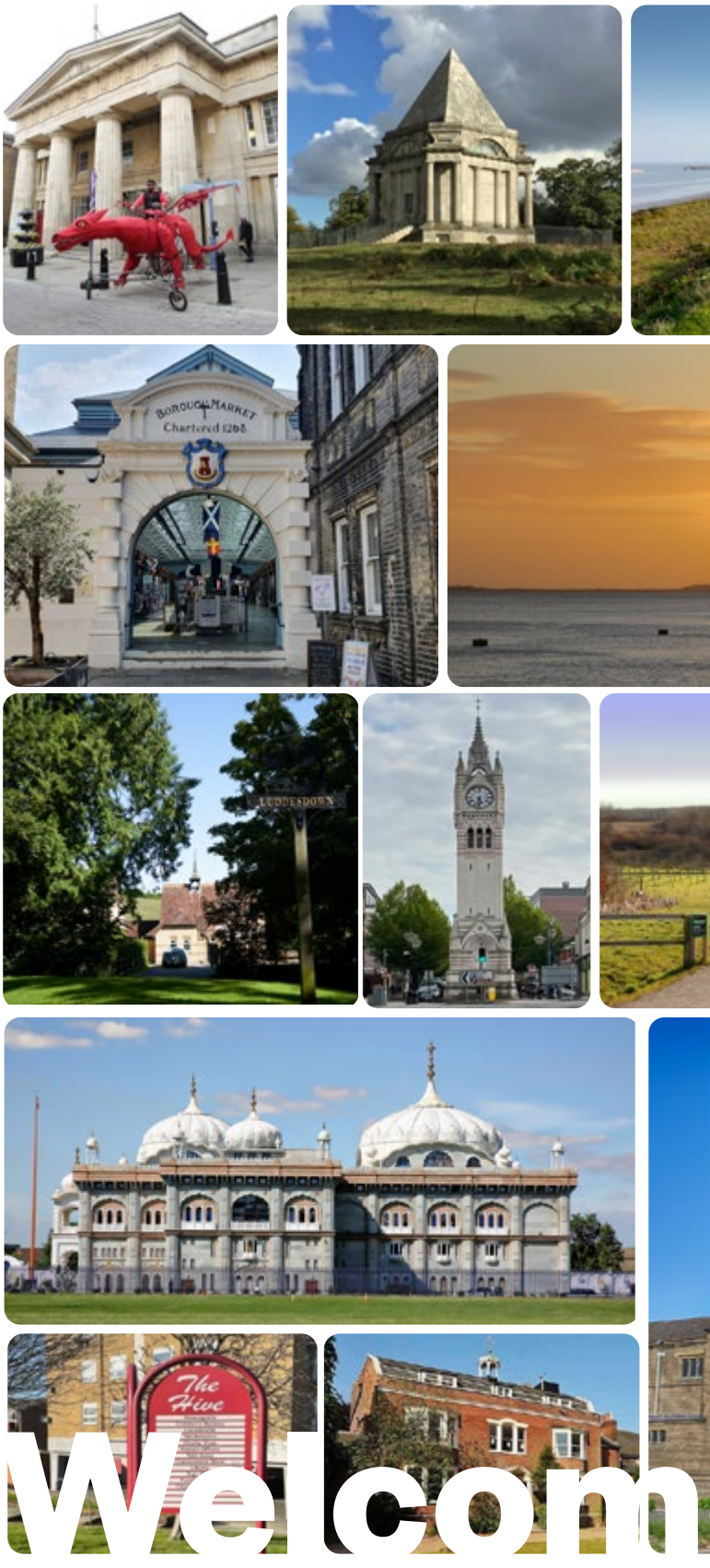
Gravesham has one of the most diverse community in Kent. This is a proud place and community is the Borough's strength. The Borough enjoys 11km of waterfront along the northern boundary, whilst the rural areas boast some of the most spectacular views of Kent.

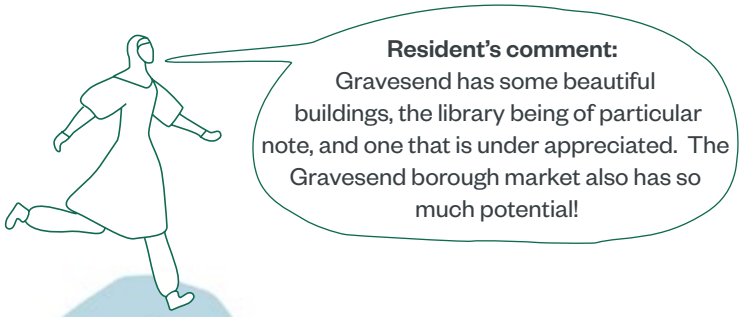
The Thames is a vital part of the Borough's past, present and future. Much of **Gravesend and Northfleet's** history lies in their strategic location beside the River Thames and on the route between London and the Channel ports. While these two historic towns share the river, they are proudly independent and each is a collection of diverse and distinctive neighbourhoods.

Today we need to re-think the way we design, use and access towns in order for them to remain resilient to climate change and vibrant places where people want to live, work or spend time.

Gravesham has an enduring industrial heritage linked to a long tradition of chalk quarrying and the production of cement and paper. While most of the historic industrial activities are now gone (the last cement factory closed in 2008), the traces they have left behind are part of Gravesham's proud history and identity. The industrial heritage with its unique buildings and spectacular chalk cliffs landscape is a key asset and a key opportunity in Gravesham's future. There is need to ensure these once thriving industrial areas continue to attract investment and job opportunities, are better connected to the towns, offer a more balanced mix of uses and allow for full access to the river for all.

Together with the Thames Estuary and marshes Gravesham boasts beautiful and varied landscapes with countryside, ancient woodlands and historic parks and gardens. Within this exceptional landscape, modern and historic villages play a central role in Gravesham's distinctive and attractive local character.





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1
Introduction

1.2 Why does Gravesham need a Design Code?

The government's **National Planning Policy Framework (NPPF)** makes clear that local planning authorities should ensure that visual tools such as design codes and guides are used to inform development proposals to provide maximum clarity about design expectations at an early stage and reflect local character and preferences.

The NPPF sets out that the **National Design Guide** and **National Model Design Code (NMDC)** should be used by local authorities to help them produce their design codes.

The National Design Guide sets out 10 characteristics of well-designed places as illustrated in Figure 2. Well-designed places have individual characteristics which work together to create its physical Character. The ten characteristics help to nurture and sustain a sense of Community and they work to positively address environmental issues affecting Climate. They all contribute towards the cross-cutting themes for good design set out in the NPPF.

Further emphasis on the production of Design Codes can be found within the **Levelling up and Regeneration Act** which:

- Requires every local planning authority to produce a design code for its area. These codes will have full weight in making decision on development, either through forming part of local plans or being prepared as a supplementary plan
- Allows local planning authorities to set design requirements at other scales either as part of their local plan, supplementary plan, or as a neighbourhood plan
- Includes a requirement for local planning authorities to prepare a Local Plan Timetable, which includes how the authority proposes to comply with the requirement for authority wide code.

The importance of well-designed places has been also emphasised by **The Building Better, Building Beautiful Commission**, an independent body set up to advise government on how to promote and increase the use of high-quality design for new build homes and neighbourhoods.

In its report, **Living with Beauty (2020)**, the Commission set out its recommendations to government and advocates for a stronger and more predictable planning system, for greater democratic involvement in planning decisions, and for a new model of long-term stewardship as the precondition for large developments.

The report also advocates a radical programme for the greening of towns and cities, for regenerating abandoned places and for pursuing the environmental targets of durability, adaptability and biodiversity.

Fig 2 The ten characteristics of well-designed places (National Design Guide)

1.3 What are the benefits of a Design Code?

As set out in the National Design Guide, achieving high quality places and buildings is fundamental to the planning and development process. It also leads to improvements in the quality of existing environments.

The underlying purpose for design quality and the quality of new development at all scales is to create well-designed and well-built places that benefit people and communities. This includes people who use a place for various purposes such as:

- To live, work, shop, for leisure and recreation, and to move around between these activities; and
- Those who visit or pass through.

It also includes people at different stages of life and with different abilities – children, young people, adults, families and older people, both able-bodied and disabled.

The Council, in its role as the Local Planning Authority, is tasked with both preparing the Development Plan that applications are assessed against and making planning decisions against the Development Plan and material considerations such as the National Planning Policy Framework.

Design Codes support paragraph 130 of the National Planning Policy Framework which states that permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions. Design Codes will therefore, inform development proposals and their assessment by Local Planning Authorities.

In summary a Design Code for Gravesham will help deliver:

DESIGN QUALITY - design codes deliver improved design quality for new developments and public realm interventions.

PLANNING CERTAINTY – a more certain process for gaining planning permission with requirements defined upfront.

ENGAGEMENT - prompting meaningful engagement with the community and key stakeholders.

EFFECTIVE PROCESS – a set of clear standards to comply with and a more streamlined planning process, reducing the need for further negotiation and delays.

TRANSPARENCY AND CONSISTENCY - a more transparent and consistent planning process for all.

Fig 3 Old Town Hall, Gravesend

1
Introduction

1.4 Purpose of the document

This document has been prepared to assist residents, architects, developers, builders and planning agents when designing development proposals. The guidance provided here is a material consideration in the determination of a planning application and will inform the Council's pre-application advice.

The Design Code expands on the Local Plan Core Strategy, and Policy CS19 in particular to provide additional clarity on what is expected of applicants when submitting design proposals, setting out the minimum requirements to achieve design quality.

The Design Code applies to the whole Borough of Gravesham and to all developments within the Borough boundary. This Code has a particular focus on providing guidance for medium to large scale residential schemes, mixed-use developments and large regeneration sites across the Borough.

However, sections of this Design Code are also important considerations for smaller sites, homeowners wishing to extend their properties, and for other uses such as commercial developments.

The Design Code will help applicants to conform with the Council's expectations for proposals that are embedded in the Borough and truly reflect the rich and unique history of Gravesham's towns and villages.

The matrix below, sets out the sections of the Design Code and specific Design Principles which are mandatory (✓) or recommended (✓) for each user group or specific type of site.

If you require guidance on Design Principles from the Council to assist you with your application, please engage the Council via the Council's pre-application service.

Design Principle	Page	Homeowner	Small sites 1-9 dwellings	Medium sites 10-150 dwellings	Large sites over 150 dwellings	Non-residential
4.1 Responding to the local community	54			✓	✓	✓
4.2 Enhance and contribute to local identity	56	✓	✓	✓	✓	✓
4.3 Responding to local history and context	57	✓	✓	✓	✓	✓
5.1 Public space	62			✓	✓	
5.2 Play	64			✓	✓	
5.3 Surface finishes	66			✓	✓	
5.4 Inclusive design and accessibility	67			✓	✓	✓
5.5 Street furniture	68			✓	✓	
5.6 Lighting	70			✓	✓	✓
5.7 Wayfinding	72			✓	✓	✓
5.8 Community-led art	73			✓	✓	
5.9 Pattern and scale	74		✓	✓	✓	✓
5.10 Height	76	✓	✓	✓	✓	✓
5.11 Tall buildings	78		✓	✓	✓	
5.12 Density	79		✓	✓	✓	

Fig 4 Matrix showing relevant design principles by application type

Design Principle	Page	Homeowner	Small sites 1-9 dwellings	Medium sites 10-150 dwellings	Large sites over 150 dwellings	Non-residential
5.13 Building line	84		✓	✓	✓	✓
5.14 Thresholds and frontages	86	✓	✓	✓	✓	✓
5.15 Roofscape	88	✓	✓	✓	✓	✓
5.16 Elevations and key corners	89	✓	✓	✓	✓	✓
5.17 Materials	90	✓	✓	✓	✓	✓
5.18 Space standards for dwellings	92		✓	✓	✓	
5.19 Aspect, orientation, daylight and sunlight	94		✓	✓	✓	
5.20 Private and communal amenity	96	✓	✓	✓	✓	
5.21 Balconies	98		✓	✓	✓	
6.1 Public transport and active travel	104		✓	✓	✓	✓
6.2 Streets	106			✓	✓	✓
6.3 Vehicular parking	108		✓	✓	✓	✓
6.4 Servicing	111		✓	✓	✓	✓
6.5 Cycle Parking	112		✓	✓	✓	✓
6.6 Protecting and enhancing blue and green infrastructure	114		✓	✓	✓	✓
6.7 Open spaces and green corridors	116		✓	✓	✓	✓
6.8 Biodiversity	118	✓	✓	✓	✓	✓
6.9 Sustainable Drainage Systems	119	✓	✓	✓	✓	✓
6.10 Planting	120	✓	✓	✓	✓	✓
6.11 Trees	121	✓	✓	✓	✓	✓
6.12 Adjacency to riverside	122		✓	✓	✓	✓
6.13 Energy efficiency and resilience	124	✓	✓	✓	✓	✓
6.14 Retrofit first	125	✓	✓	✓	✓	✓
7.1 Rich mix of opportunities	130		✓	✓	✓	✓
7.2 Management and maintenance	131		✓	✓	✓	✓

1
Introduction

1.5 Design Code structure

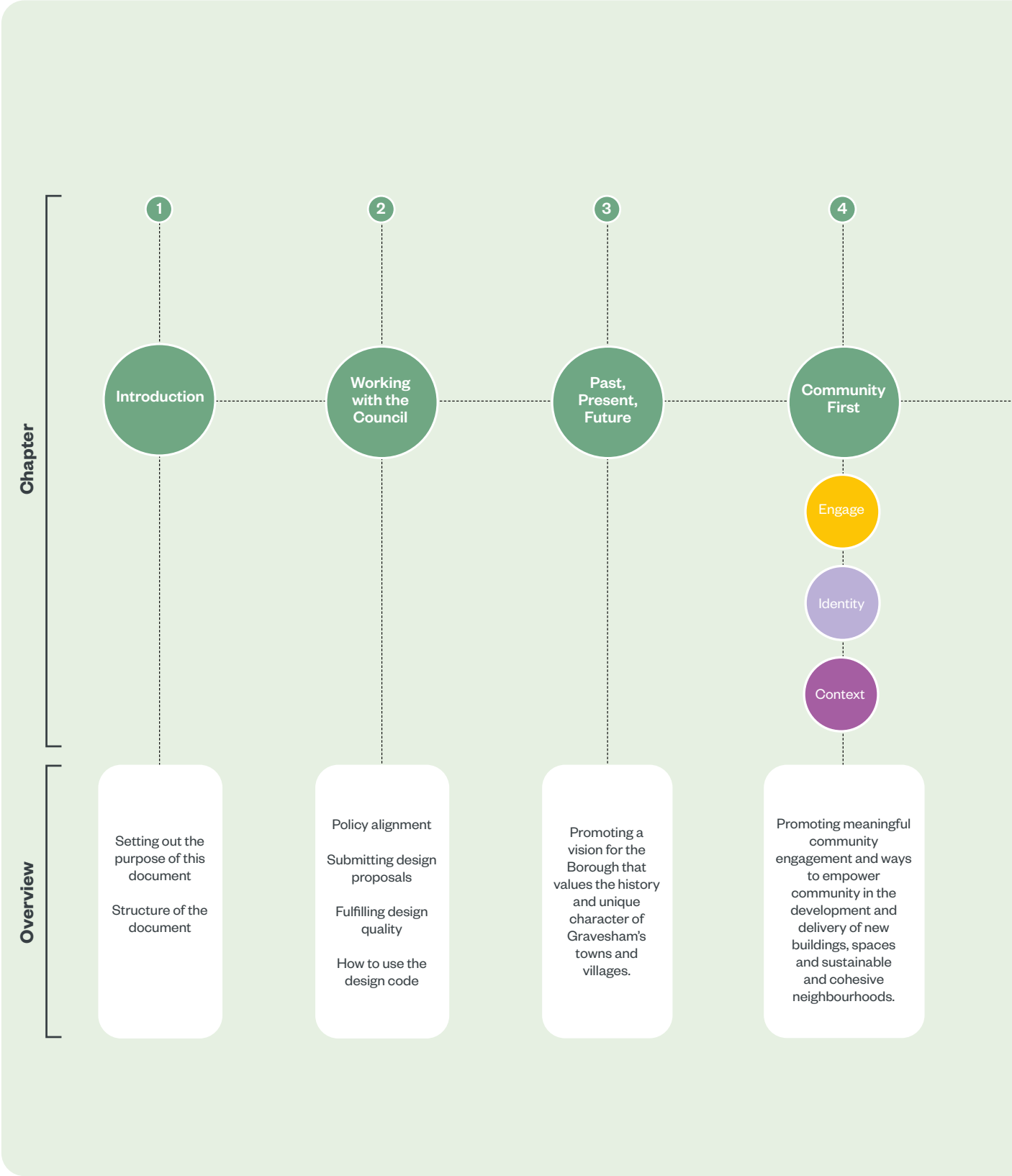
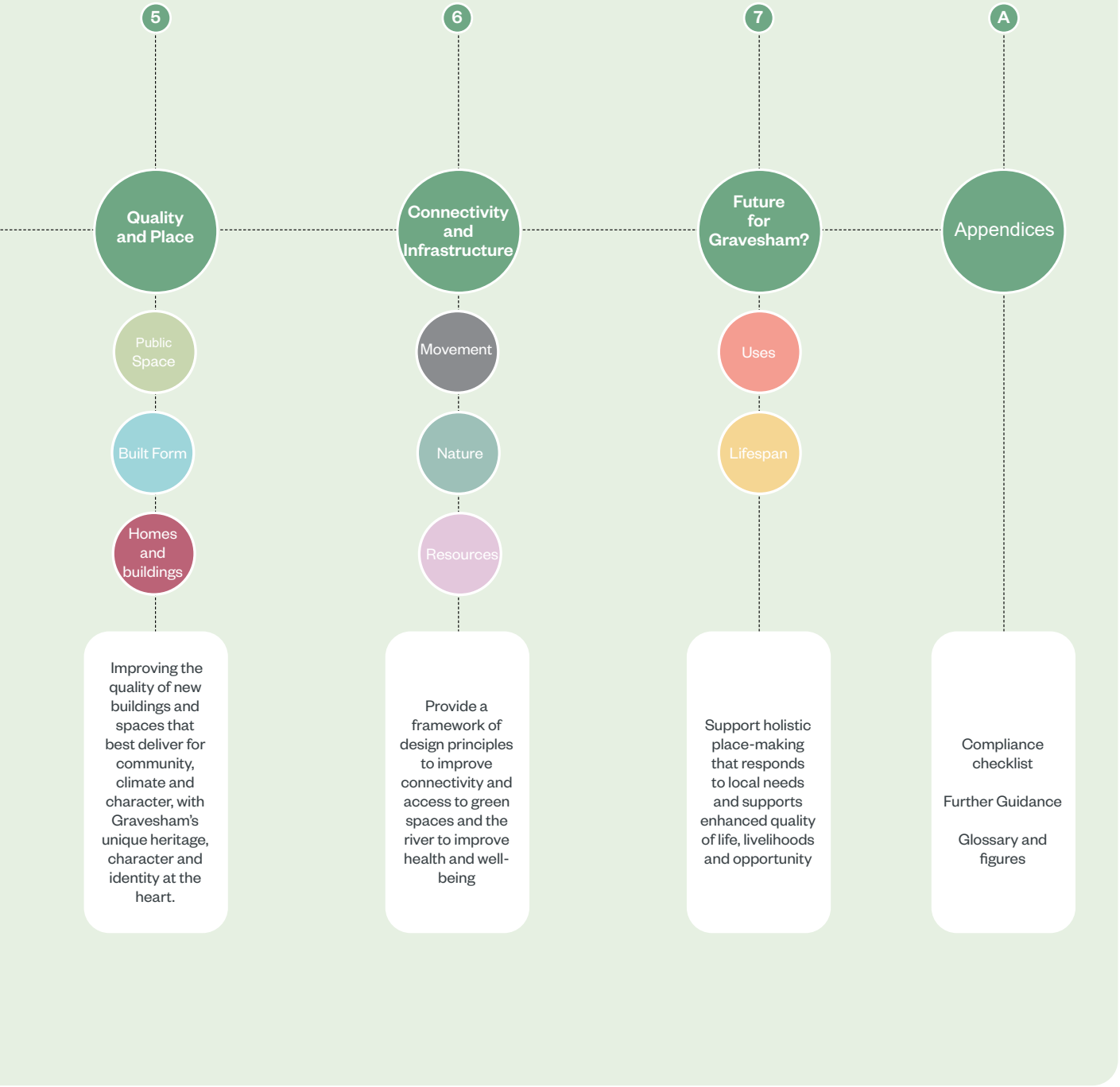


Fig 5 Diagram illustrating the structure of the Design Code


5
6
7
A
Quality and Place
Connectivity and Infrastructure
Future for Gravesham?
Appendices
Public Space
Built Form
Homes and buildings
Movement
Nature
Resources
Uses
Lifespan
Improving the quality of new buildings and spaces that best deliver for community, climate and character, with Gravesham's unique heritage, character and identity at the heart.
Provide a framework of design principles to improve connectivity and access to green spaces and the river to improve health and well-being
Support holistic place-making that responds to local needs and supports enhanced quality of life, livelihoods and opportunity
Compliance checklist
Further Guidance
Glossary and figures

“I hope to see walking and cycling prioritised to become the natural choice for people’s short everyday journeys.”

Resident’s comment

Working

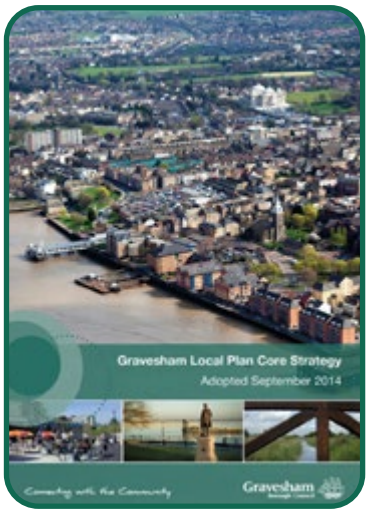
2

with the Council

2
Working with the Council

2.1 Policy alignment

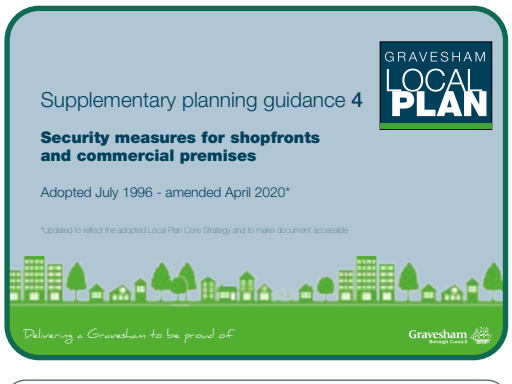
The Borough's Development Plan sets out what the opportunities are for development in the Borough and policies to be taken into consideration when determining planning applications for development. The Design Code has been adopted as a supplementary planning document (SPD). SPDs provide additional guidance on some of the policies set out in the Development Plan and are taken into account as material considerations in dealing with planning applications. The Design Code, therefore, is a material consideration in the determination of planning applications.



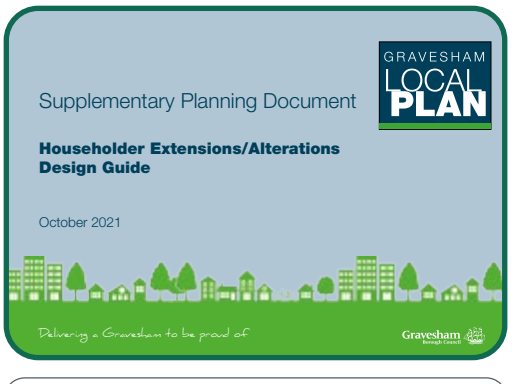
Local Plan (adopted 2014)

Conservation Areas SPG

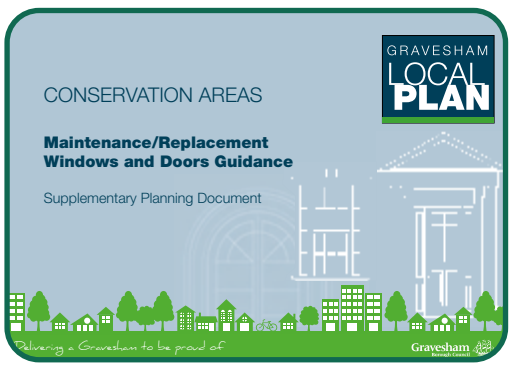
The adopted Local Plan together with its Supplementary Planning Guidance sets out the policy framework for development in the Borough. These documents have formed the foundation of the Design Code.



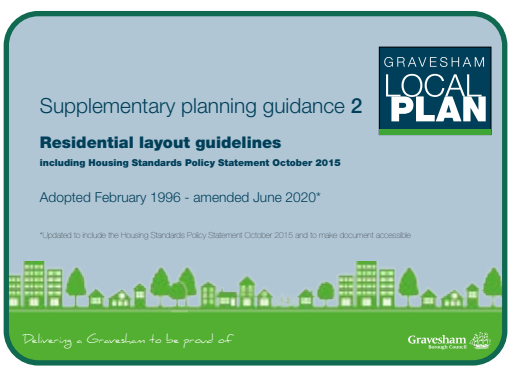
Security measures for shopfronts SPG



Household extensions/alterations SPG



Maintenaince / replacement windos and doors SPD



Residential layout guidelines SPG

In 2020-2021 several SPGs were published or updated as part of the Local Plan Review Regulation 18 process.

These documents introduce design guidelines for specific subjects and will continue to be referred back to in the Design Code.

Fig 6 Local Policy

The Design Code builds on the core design policies within the National Planning Policy Framework (NPPF), the National Design Guide and the Local Plan. Beyond these core national and local design policies, different elements of the Code will also supplement other Gravesham's SPDs.

Baseline Analysis

Design Code

The Design Code builds up on the context, policy and character information set out in the Baseline Analysis.

The Design Code has the aim to implement the adopted Local Plan and SPGs.

Regulation 18 Local Plan and evidence base

EMERGING
GRAVESHAM LOCAL PLAN CORE STRATEGY

Emerging Local Plan

A initial review of the Local Plan and its policies was published for consultation in 2020. Whilst the Regulation 18 documents are only drafts documents they do give indication of the direction of travel for the emerging new Local Plan currently in the works.

The Regulation 18 Local Plan was published together with updated evidence base studies that have helped informing the Design Code.

2
Working with the Council

2.2 The Council's strategies

The adopted and emerging Development Plan link to the objectives and commitments of the Corporate Plan and its supporting strategies. The Development Plan provides the spatial expression of these documents and sets out what development is going to happen, when, and how. In doing so it sets out the minimum requirements to achieve high quality design that puts people and place at front and centre of the design process.

CORPORATE PLAN 2023-2027

Together - Proud to be Gravesham

Corporate Plan

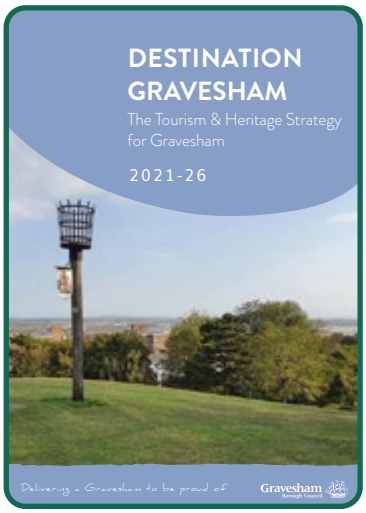
The Corporate Plan sets out the **strategic direction** for the Council over the 2023-2027 period.

The Plan establishes a suite of corporate objectives and supporting policy commitments that act as a framework against which all council strategies, projects and initiatives will be planned, resourced and delivered.

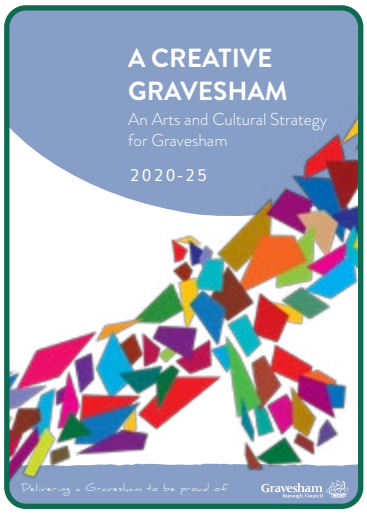
The three corporate objectives are **ONE BOROUGH, ONE COMMUNITY, ONE COUNCIL** and have the ambition to create a positive sense of belonging in a community where we are Together - Proud to be Gravesham.

Climate Change Strategy

In June 2019 Gravesham Borough Council passed a formal motion to declare climate emergency and committed to taking a lead in achieving Carbon Neutral status. In 2022 the Council has published its Climate Change Strategy identifying the key Climate Change action priorities for the Council and the Borough as a whole.



Tourism and Heritage Strategy



Arts and Cultural Strategy

A suite of supporting strategies to establish a culture of place and community-led sustainable regeneration for Gravesham.

Fig 7 Corporate Plan and supporting strategies

Baseline Analysis

Design Code

Design for Gravesham builds up on the vision and commitments for a community and place-led regeneration set in the Corporate Plan.

PLANNING IN GRAVESHAM STRATEGY

Planning in Gravesham Strategy

Emerging strategy to help clarifying planning process in Gravesham.

2
Working with the Council

2.3 Submitting design proposals

Design and Planning Process in Gravesham

All development proposals seeking planning permission must evolve through a logical and iterative process. The diagram below illustrates the steps that all medium and large schemes are expected to follow. There are elements of this diagram that are also considered to be best practice for homeowners and small sites to follow.

The Council is keen to re-iterate the importance of the pre-application process. Applicants should hold pre-application meetings with council officers at an early stage in the design process to discuss emerging ideas and sensitivities and ensure that the design process is heading in the right direction.

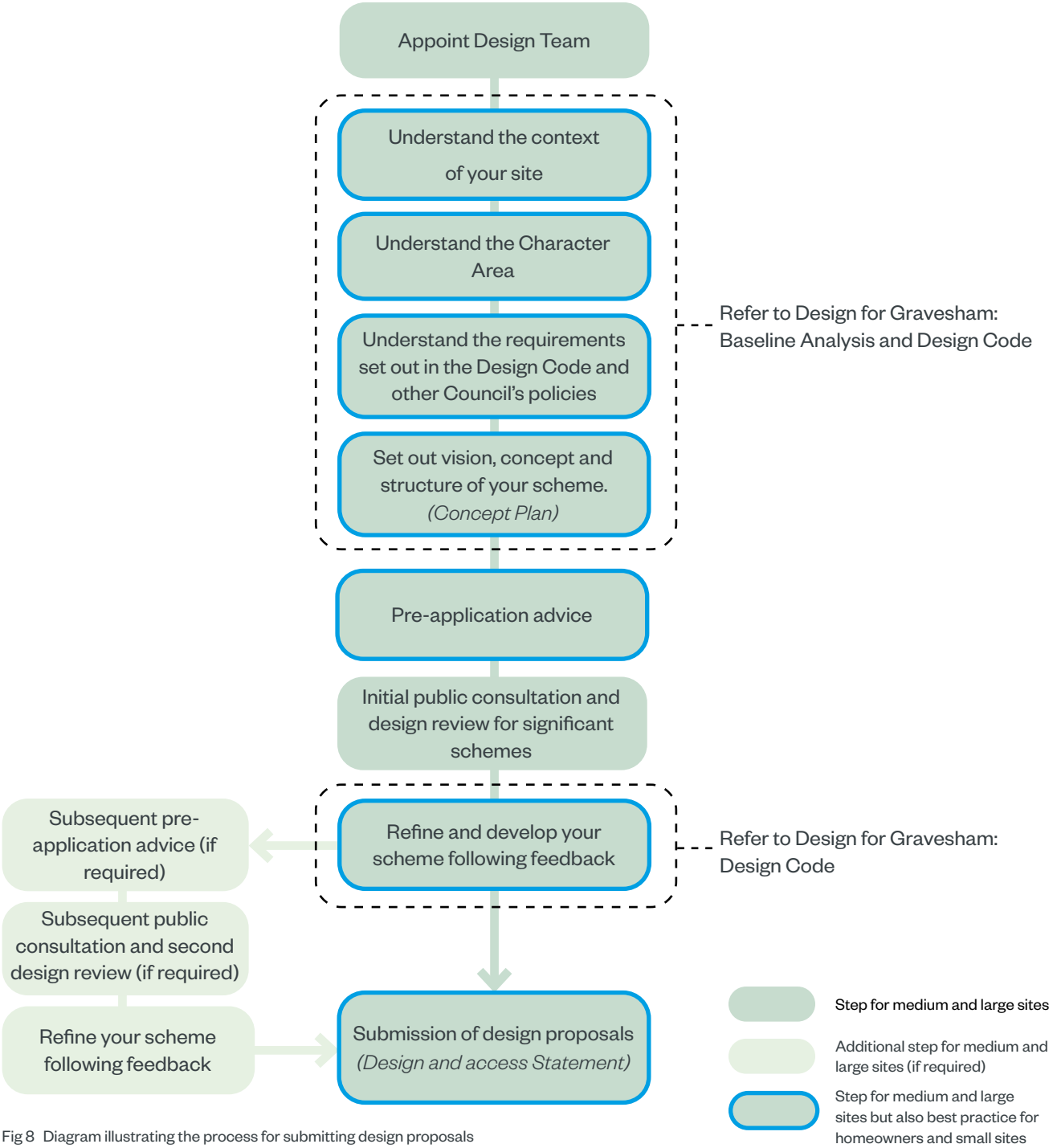


Fig 8 Diagram illustrating the process for submitting design proposals

Design Review

The NPPF advocates the use of design review to improve the design quality of new development. In line with best practice for significant schemes (either because of their scale or sensitivity) Gravesham Borough Council may seek independent and professional design advice. This will be in agreement with the applicant(s) and will include full cost recovery.

The concept plan

For medium and larger schemes the vision should be supplemented by a high level concept plan. The aim of the concept plan is to show in a simple and clear way the key design features that drive the layout of the proposed development and how it relates to surrounding areas. The concept plan should include an indicative high level layout and illustrate the key components. These features will be specific to each individual site, but may typically include: gateways and access points, focal points, key building frontages, broad street layouts, location of open space, retained and proposed landscape features (including an approach to biodiversity), landmarks, and key view corridors. A concept plan is a higher level strategic tool than a masterplan. It sets the principles for the masterplan and is an important tool for engagement.

Together the vision and concept plan should sum up what kind of place is being created. This allows the developer, local authority and local communities to discuss the basic structure of the proposals and how they can be evolved and improved to achieve design excellence.

Large sites	• Residential development of over 150 dwellings • Non-residential development of 10,000m2 or more
Medium sites	• Residential development of 10-150 dwellings • Non-residential development of 1,000m2 or more and less than 10,000m2
Small sites	• Residential development of 1-9 dwellings • Non-residential development of less than 1,000m2

Fig 9 Definition of development size

Design and Access Statement

Applications which comply with the principles and practice set out in this Design Code are much more likely to be successful than those that do not. For applications which require a Design and Access Statement, developers and designers should use this document to clearly explain the rationale and vision for their design. Once established and agreed, the vision anchors and guides the design team and enables it to communicate clearly and simply what the development is seeking to be and to achieve.

The Council recommends framing Design and Access Statements around the Design Code, with sufficient written and drawn information to demonstrate how proposals will successfully align with the Design Code's design principles.

Understanding the context and characteristics of the surrounding area should play an important role in influencing the design of a scheme. The design story told in the Design and Access Statement should begin with a character assessment, leading to an identification of key characteristics that have been utilised and acknowledged by the scheme's design.

Further guidance on Design and Access Statements can be found in the CABE publication "Design and Access Statements How to write, read and use them".

2
Working with the Council

Community engagement

When community engagement is required to validate a planning application, developers and designers will be expected to seek the views and opinions of local residents and stakeholders to help inform preparation of proposals. The Council will be particularly interested in understanding how the views of various people, groups and organisations have shaped the design proposals.

Applicants should set out what engagement has been undertaken, with whom, what issues were raised and how the proposals respond to the issues. The Design and Access Statement could include a chapter on engagement. Alternatively, and for major regeneration sites, a separate Consultation Statement may be necessary.

Design Out Crime

Poorly designed places can encourage crime and anti-social behaviour. Secure buildings and safe places must be a key objective for designers.

Applicants are strongly encouraged to seek guidance from the local 'Secured by Design' officer during the pre-application stage and they should use crime and anti-social behaviour data about the locality to inform design decisions.

Fig 10 St. John's Church, Higham

2.4 Fulfilling design quality

As the development process commences post-planning, it is important the designs, details and concepts approved are physically delivered and not value engineered during this process.

This design retention and delivery process should begin before and during the planning process, ensuring proposals being submitted for consent are physically and financially viable.

Robust materials

Material and detailing choices play an important role in successfully translating a design from concept to reality. In reviewing materials the Council will seek to ensure they are durable and robust; ensuring they function correctly and weather well over time, retaining the design quality of the building through its life-cycle.

The selection of a limited palette of quality materials will reduce the need for junctions, abutments and flashing details; which can increase the potential for weather damage or degradation.

Sample panels

To assist the selection and approval of materials and façade detailing the Council, where appropriate, will condition the creation of sample panels to demonstrate how these elements will effectively work together.

Panels will be requested to demonstrate façade detailing, window reveals, rainwater management, material joints and junctions. They may also be required to demonstrate construction methods and workmanship to be applied.

For householder applications, in most cases, the applicant would be required to provide samples prior to the Council granting permission.

Value engineering

Whilst the Council recognises that proposals may need to alter as a result of constraints identified post planning, the principle of actively up-designing for planning and then lowering quality post approval will not be accepted.

Value engineering should not be used as a tool to deteriorate the quality of the building or landscape. Its role should be to resolve construction challenges, ensure best value and aid build efficiency.

The Council will define what level of variation due to value engineering will be considered acceptable and when a new application will need to be submitted.

Where proposals reduce the quality of a scheme in design terms, and no longer support beauty and placemaking outcomes, proposals will not be supported.

Design Team retention

To help manage design quality, the Council strongly supports the retention of a design team from concept through to completion. This helps retain a clear understanding of how the design proposals have evolved; and should help ensure the design concept and integrity is maintained.

Golden Thread Regulations

As set out in Planning Gateway One, and in line with government's policy, for residential and education accommodation buildings of 18m and above (7 storeys and above), duty holders and accountable persons will have a legal duty to create, obtain, store and share documents and information about their building, in a prescribed format.

The Golden Thread Regulations, set out in Planning Gateway One, are a tool to manage buildings as holistic systems and allow people to use information to safely and effectively design, construct and operate their buildings.

The Golden Thread of key information should be passed across to future building owners to underpin more effective safety management throughout the building life cycle.

The Golden Thread Regulations address the problems within the industry of key information not being effectively managed, or even available throughout the life cycle of the building, including when there is a change in ownership.

2
Working with the Council

2.5 How to use this design code

The Design Code's structure reflects the sequence by which successful places are designed, setting the broad strategic considerations of overall layout before thinking about the details of buildings and spaces.

All developments will need to be designed in light of the Council's strategic vision and four main threads, as set out in Fig.34 of this document:

- **Community First**
- **Quality and Place**
- **Connectivity and Infrastructure**
- **Future for Gravesham?**

The Design Code includes two types of parameters: mandatory and expected.

Mandatory parameters are in line with the Development Plan and material planning considerations. They are considered to be essential characteristics for the proposed development and must be followed. **Must** indicates mandatory design principle compliance.

Expected parameters are in addition to the Development Plan and material planning considerations, and are therefore for guidance. **Should** indicates strong encouragement that the design principle is followed.

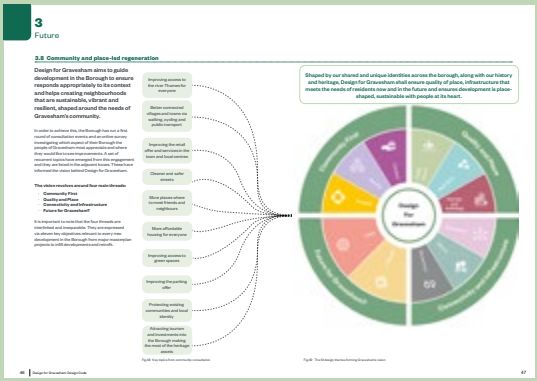
Applicants must complete and submit the **Compliance Checklist,** included in Appendix, with their application. The checklist refers to the Design Principles set out in this Design Code. Applicants must respond to the Design Principles which are relevant to their type of application only, as set out in Fig.4. The Compliance Checklist will be used by the planning authority to help assess planning applications. It is strongly recommended that applicants use it at the early stages of the design process to help guide and inform the development of the project.

Step 1

Understand the Council's expectations and how the Design Code links to the existing planning policy context.

Refer to *Chapter 1: Introduction*

Chapter 2: Working with the Council

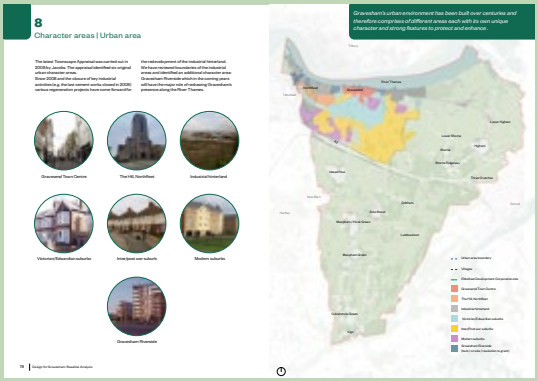


Step 2

Locate the Council's vision for community and place-led regeneration based on four main threads and eleven design themes.

Refer to *Chapter 3: Past, present, future*

Fig 11 How to use this Design Code



Step 3

Identify which character area(s) your development is located within or closest to.

Refer to *Design for Gravesham: Baseline analysis.*

Step 4

Locate the relevant design principles for your application type, by referring to the matrix in Fig. 4. Each design principle comes with a list of **"musts"** (mandatory parameters) and **"shoulds"** (expected parameters).

Some urban design principles have additional indications specific to Gravesend town centre.

Refer to *Chapters 4, 5, 6 and 7*

Design principles come with pictures of good and bad practice examples.

Step 5

Don't forget to complete the Compliance Checklist in Appendix and include this within the planning application submission.

Refer to *Appendix: Compliance Checklist*

“The promenade is particularly important to me as it’s my go to open space when I need to walk or exercise.”

Resident’s comment

Past

3

, present, future

3
Past

3.1 Urban area

Much of Gravesend and Northfleet's history lies in their strategic location beside the River Thames and on the route between London and the Channel ports.

There is much evidence of Roman settlement in the area. The former Roman Road of Watling Street follows the approximate line of the existing A2 and a major Roman settlement was uncovered at Springhead.

3.2 Gravesend

Gravesend was recorded in the Domesday Book of 1086 as Gravesham - "graaf-ham", the home of the reeve or bailiff of the Lord of the Manor. The town grew up near the route of the old Roman road of Watling Street, linking London to the coast.

Gravesend was granted a market charter in 1268, and the market is still held today. The town was incorporated in the same year, when the first mayor was elected, though Gravesend did not gain a town hall until 1573. The Royal Charter of 1401 allowed Gravesend to operate ferries to and from London. The ferry service became known as the Long Ferry and was extremely popular as it avoided the perils of travel by road.

Gravesend has two historic piers. The oldest is Town Pier, built in 1834 and the oldest example of a cast-iron pier in the world. The Royal Terrace Pier was erected a decade later, in 1844.

Perhaps the most iconic building in Gravesend is the Clock Tower on Harmer Street. The tower was built in 1887 to mark the golden anniversary of Queen Victoria's coronation. The design emulates the Clock Tower of the Palace of Westminster in London.

3.3 Northfleet

Northfleet derives its name from being situated on the northern reach of what was once called the River Fleet (today known as the Ebbsfleet River). It has been the site of a settlement on the shore of the River Thames adjacent to Gravesend since Roman times. It was recorded as Norfluet in the Domesday Book, and Northflet in 1201.

Northfleet became a town in 1874 with the Northfleet Urban District Council being established c. 1894. In 1974 it was merged with the adjacent Borough of Gravesend.

The Romans originally dug chalk in the area, with cement creation later. The cement industry requires plentiful water supplies, and chalk as its main ingredient. In 1796, James Parker set up kilns on Northfleet creek to make Roman cement, it was the beginning of a large complex of cement works along the river. By 1900, there were nine cement works operating on the Thames between Swanscombe and Gravesend. The last cement plant in Northfleet ceased operation in 2008. One of the largest chalk pits is now underwater and known locally as The Blue Lake.

Fig 12 Beach and Pier, Gravesend

Fig 13 St George's Church, Gravesend

Fig 14 Rosherville Gardens

3.4 Rural area

North Kent has a long history of known settlement.

Numerous crop marks have been identified around Cobham Hall. Bronze Age crop circles have been recorded in the fields round Thong. Neolithic and Iron Age finds are recorded from within Cobham Park and from the area around Higham and Meopham. Just to the south of Watling Street, close to Cobham Hall, are a Roman well and a 2nd and 3rd century villa site. A first and second century Roman settlement was discovered near Higham. Roman remains have also been found at nearby Meopham, including a Roman villa. The church at The Street (Meopham) is an Anglo-Saxon foundation, 'daughter' to the earlier Anglo-Saxon 'mother' church of Shorne. Its site was the local centre from which Anglo-Saxon colonisation of this part of the Downs proceeded.

Outlying small village greens within the Kent downlands such as those at Harvel or Hook Green are said by Alan Everitt in his 1986 book to often indicate 'early cattle stations or vaccaries' developed within areas of 'wood-pasture'. He notes that the Kent historian Hasted mentions houses and cottages 'built round the little greens or forstalls' and says that fore and steall seems literally to have meant a 'stall', 'enclosure', or 'standing place' in front of a farmhouse.

He points out that in origin forstall 'no doubt referred to an enclosure for livestock, often a place where cattle were brought in to be milked ' and says that the word eventually became interchangeable with 'green'. Over time, with the subdivision of farm-holding through Kent's inheritance system, further farmhouses appeared around these little farm-greens.

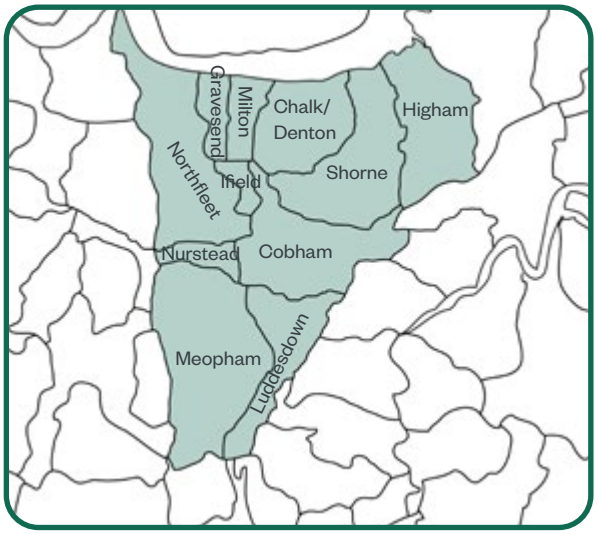


Fig 15 Ancient parishes in Gravesham

Fig 16 The Old Mill, Meopham Green

Fig 17 The Old Village Pump, Cobham (1920)

Fig 18 Higham Village (1912)

3
Present

3.5 Character Areas of the built form

The latest Townscape Appraisal of Gravesham was carried out in 2008 by Jacobs. The appraisal identified six original urban character areas.

Since 2008 and the closure of key industrial activities various regeneration projects have come forward for the redevelopment of the industrial hinterland.

We have considered the Borough's major brownfield regeneration opportunities, which reflect allocations in the Local Plan Core Strategy and some major planning applications to identify an area we term as Gravesham Riverside. Gravesham Riverside will have a major role in redrawing Gravesham's presence along the River Thames and within this area, development will have to respond to local characteristics, due to the differing characteristics of the Riverside.

The Townscape Appraisal also included an analysis of all villages and settlements within the rural area.

We have taken on board the key findings of the 2008 appraisal and introduced a character framework that takes its cues from the National Character Areas (NCA) and the local landscape character areas identified by the Landscape Character Assessment.

The above has led us to identify seven rural character areas as illustrated in Fig. 23, which act as a starting point for consideration of local character at a Borough level.

Applicants bringing forward design proposals, should undertake a local analysis and assessment of the site's immediate character area and utilise this assessment to inform their proposals.

Fig 19 Gravesend Town Centre

Fig 21 Cable Wharf

Fig 20 Our Lady of Assumption, Northfleet

Fig 22 The Leather Bottle, Cobham

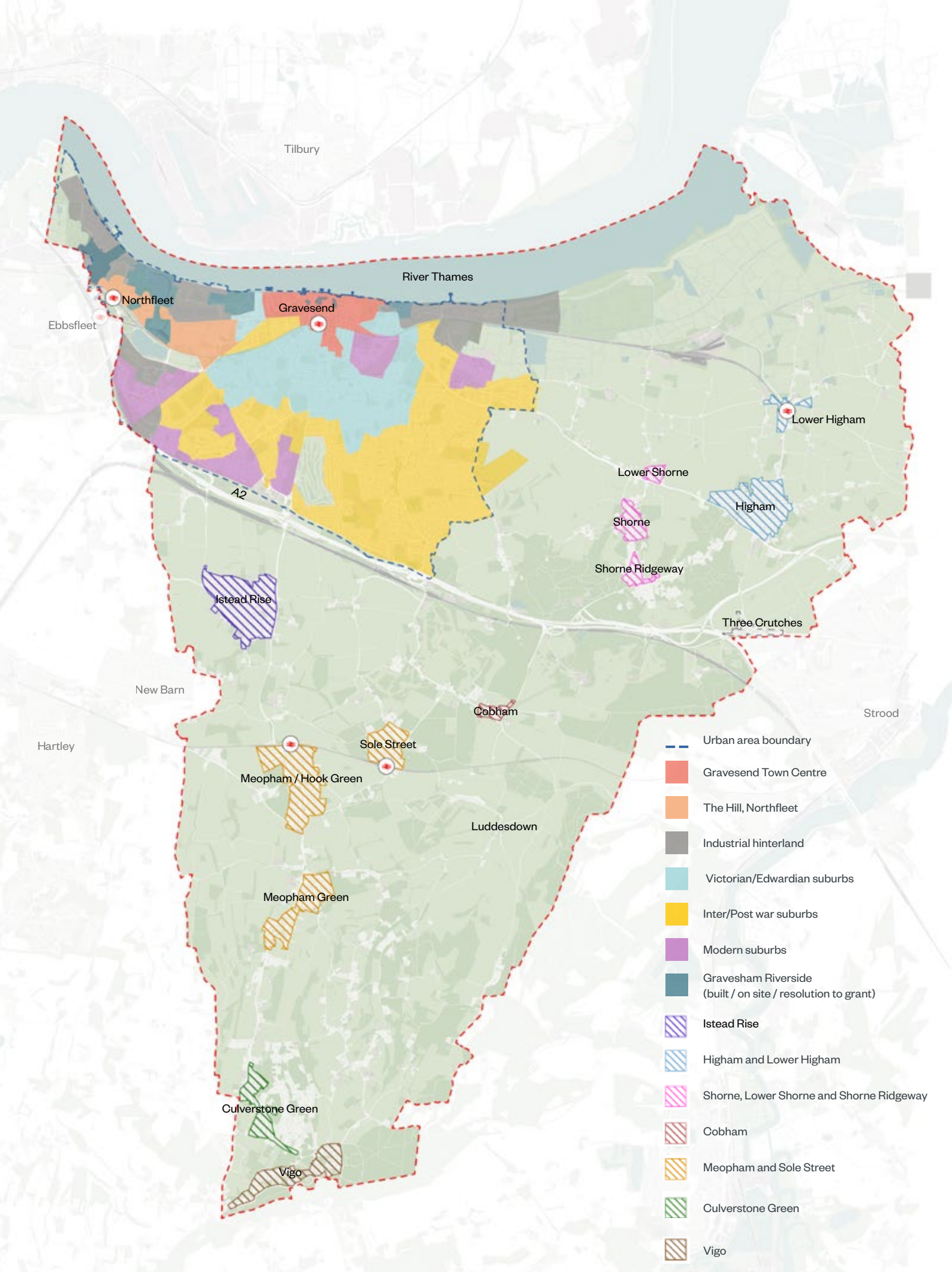


Fig 23 Prevailing character areas of the built form

3
Present

3.6 Gravesend today

31% of respondents living in Gravesend have put "Proximity to nature" as the best thing about where they live, followed by a **20%** who said they value the character of the area

48% of respondents living in Gravesend would like to see improvements to safety and public lighting followed by a **29%** of residents who wanted to see more greenery

15% of respondents living in Gravesend prefer to meet other people outside of Gravesend, while a **12%** prefer to meet during a country walk

41% of respondents living in Gravesend travel to work by car followed by a **17%** who travel by train and a **14%** who walk to work

Fig 24 Gravesend High Street

Fig 25 Royal Pier Road

Fig 26 Copperfield Academy, Dover Road

Fig 27 Homemead Retirement Housing

3.7 Northfleet today

34% of respondents living in Northfleet have put "Proximity to nature" as the best thing about where they live, followed by an **17%** who said they value the character of the area

45% of respondents living in Northfleet would like to see improvements to safety and public lighting followed by a **31%** of residents who want to see more greenery

13% of respondents living in Northfleet meet other people during a country walk, **12%** in the High Street while a **9%** prefer to meet other people somewhere else rather than the local area

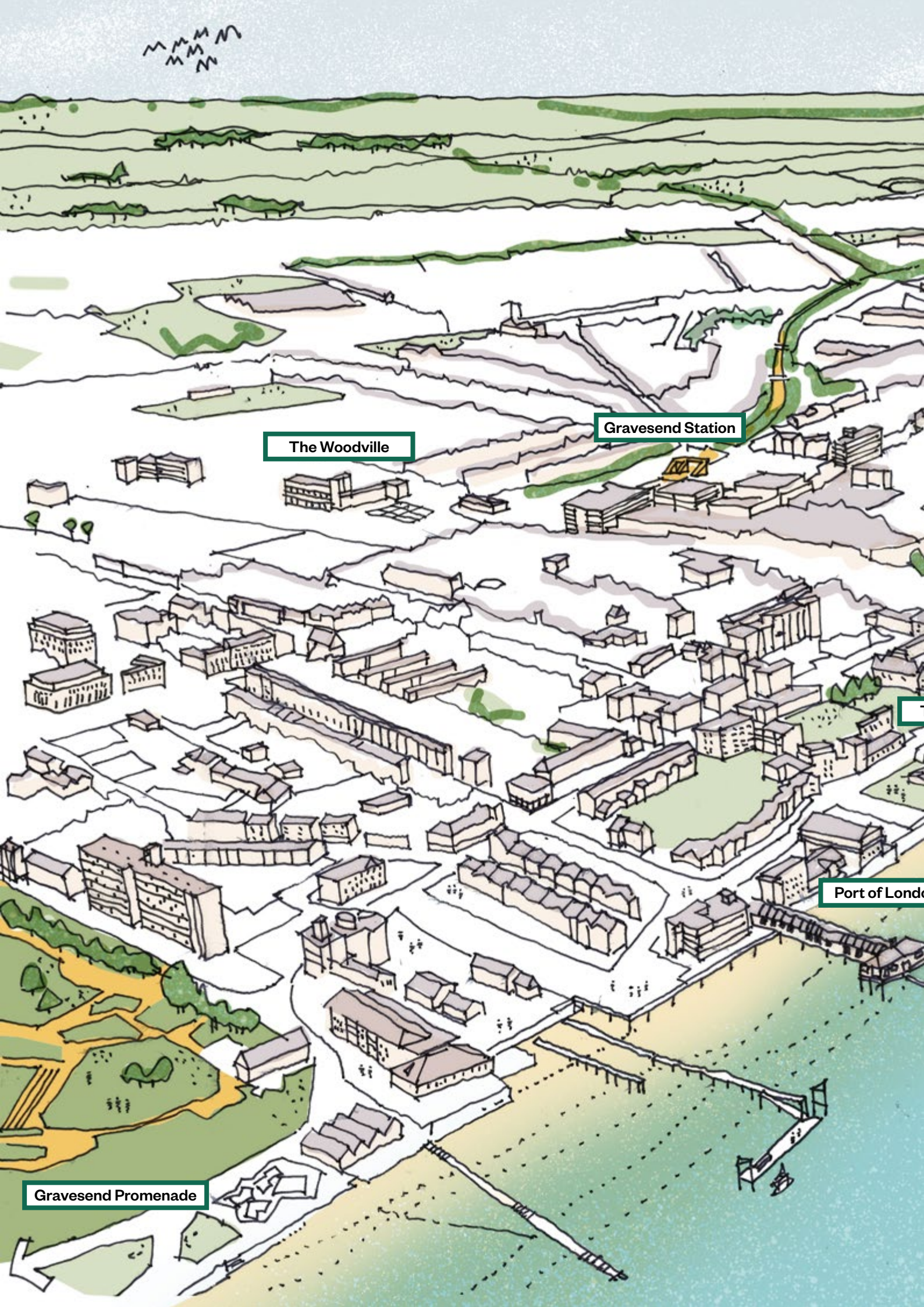
44% of respondents living in Northfleet travel to work by car followed by a **14%** who travel by train and a **11%** who walk to work

Fig 28 All Saints Church

Fig 29 Perry Street

Fig 30 The Hive

Fig 31 Carl Ekman House


Gravesend Station
The Woodville
Port of Londo
Gravesend Promenade

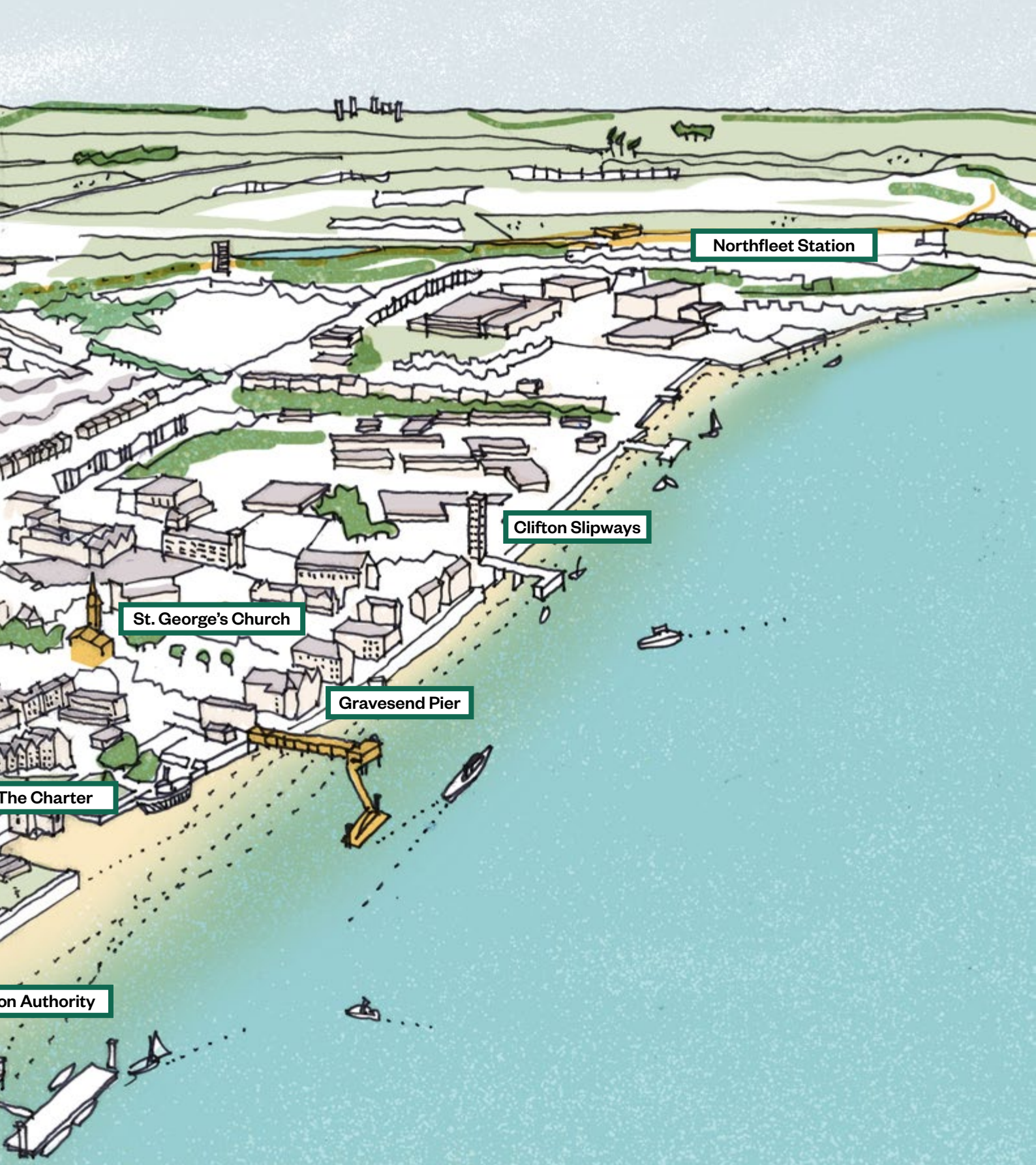


Fig 32 Sketch aerial view of Gravesend and Northfleet

3.8 Community and place-led regeneration

Design for Gravesham aims to guide development in the Borough to ensure it responds appropriately to its context and creates neighbourhoods that are sustainable, vibrant and resilient, shaped around the needs of Gravesham's community.

In order to achieve this, the Council has run in person consultation events and online surveys investigating which aspect of their Borough the people of Gravesham most appreciate and where they would like to see improvements.

A set of recurrent topics have emerged from this engagement and they are listed in the adjacent boxes. These have informed the vision behind Design for Gravesham.

The vision revolves around four main threads:

- **Community First**
- **Quality and Place**
- **Connectivity and Infrastructure**
- **Future for Gravesham?**

It is important to note that the four threads are interlinked and inseparable. They are expressed via eleven design themes relevant to every new development in the Borough from major masterplan projects to infill developments and retrofit.

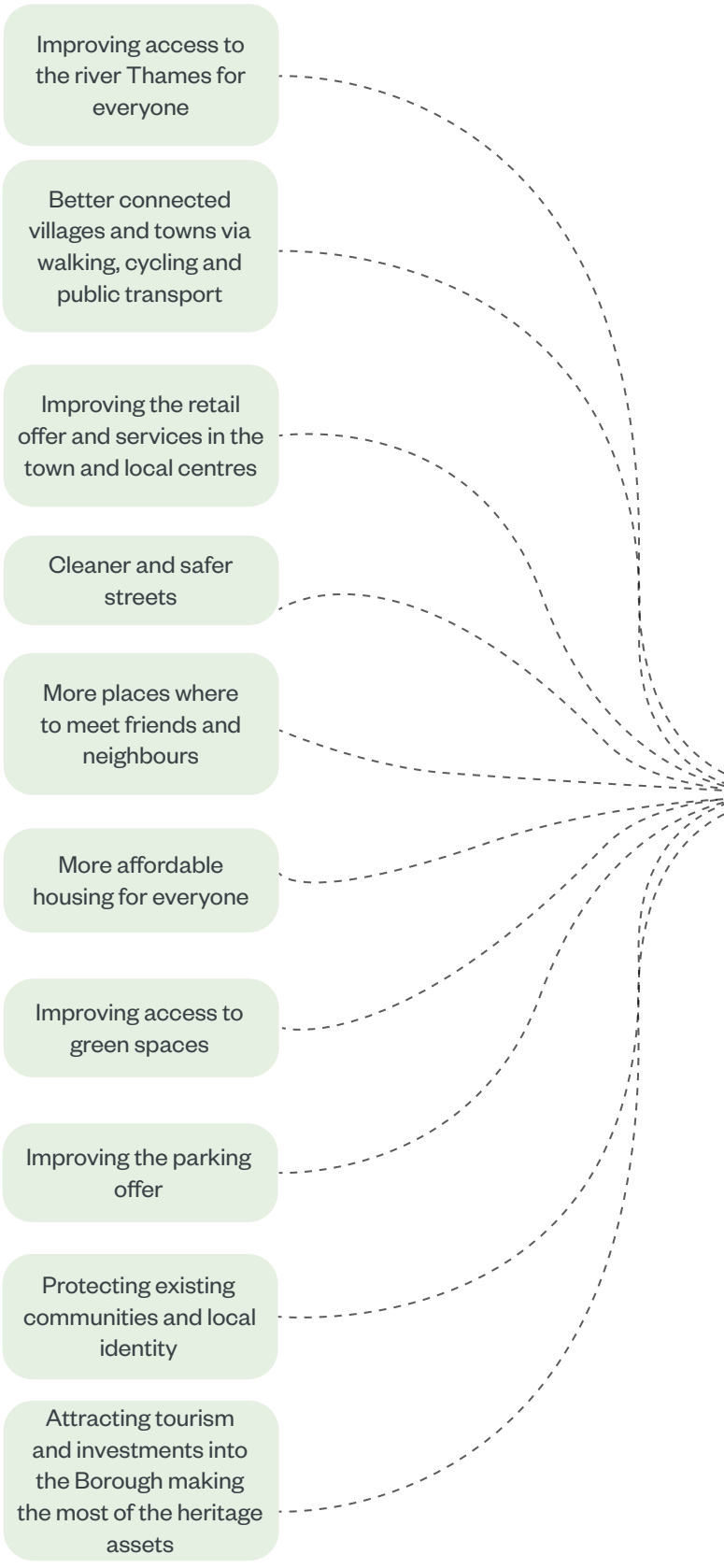


Fig 33 Key topics from community consultation

Shaped by our shared and unique identities across the Borough, along with our history and heritage, Design for Gravesham shall ensure quality of place, infrastructure that meets the needs of residents now and in the future and a sustainable and place-led development with people at its heart.

Fig 34 The 10 design themes forming Gravesham's vision

3
Future

3.9 Future for Gravesend Town Centre?

a. A shopping offer of recognisable high street brands and services located along New Road and within the town's two shopping centres.

b. An **independent** shopping offer located along the historic High Street, with views towards the river.

c. Improved access to the **Thames Riverside** with its vital role to the towns unique heritage.

d. An **experiential** offer including attractions, historic buildings and monuments, great green spaces, a unique hospitality offer centring on the Borough Market and high quality safe walking/cycle links connecting Gravesham's rural communities to the town centre.

e. An vibrant **cultural** offer (from St George's Arts Centre, to the plans for St George's Square and Gravesend Cultural Quayside) with a programme of community focused events.

f. High quality new homes and decades of **community and place-led mixed-use, mixed tenure regeneration** in development and in the pipeline along Gravesham Riverside.

g. Create a **sustainable network of unique local centres** co-locating key community facilities and commercial activities and better connected by pedestrian and cycling routes and by excellent, cost-effective public transport.

h. Bringing **nature** from the surrounding countryside into the heart of the urban area through green corridors along local cycling and walking routes. The

Fig 35 Gravesend emerging vision

green corridors will link a restored and enhanced network of existing green spaces.

i. Protect and enhance the **heritage assets** including Gravesham's enduring industrial heritage.

j. Improved **legibility of streets** with new landmark/marker buildings to aid navigation and with priority given to active travel.

k. Improved **connectivity** between the urban area and surrounding countryside to tackle severance caused by infrastructure.

l. An improved **play** offer for children through play on the way, safer streets and improved playgrounds.

m. Promotion of new housing that can cater to an ageing population following the **HAPPI principles** (Housing for an Ageing Population Panel for Innovation).

n. Promotion of **retrofit** of existing building stock where appropriate to improve resilience against climate change.

o. Promotion of **tree planting and Sustainable Drainage Systems (SuDS)** to reinforce links with surrounding nature and countryside.

p. Promoting Gravesend proximity to Stratford with its 6 **universities** (UCL East, UAL London College of Fashion, Staffordshire University, Loughborough University, Teeside University, LMA) and 11,000 students only 15 minutes away by train.

River Thames

3.10 Future for Northfleet?

a. Restored **local centres** offering local retail and other services, strengthening the local economy and pride of belonging.

b. Strengthening **community identity**, with a must for any development coming forward to be place and community led.

c. Create a **sustainable network of unique local centres** co-locating key community facilities and commercial activities and better connected by pedestrian and cycling routes and by excellent, cost-effective public transport.

d. Improved **access to green spaces** and riverside for all.

e. An improved **play** offer for children through play on the way, safer streets and improved playgrounds.

f. Promoting a **contextual architecture** that talks to the heritage and character of Northfleet.

g. Introduction of **residential led uses within the industrial areas** along the riverside promoting mixed-use sustainable neighbourhoods including affordable and social housing.

h. Bringing **nature** from the surrounding countryside into the heart of the urban area through green corridors along local cycling and walking routes.

i. Improved **legibility of streets** with new landmark/marker buildings to aid navigation and with priority given to active

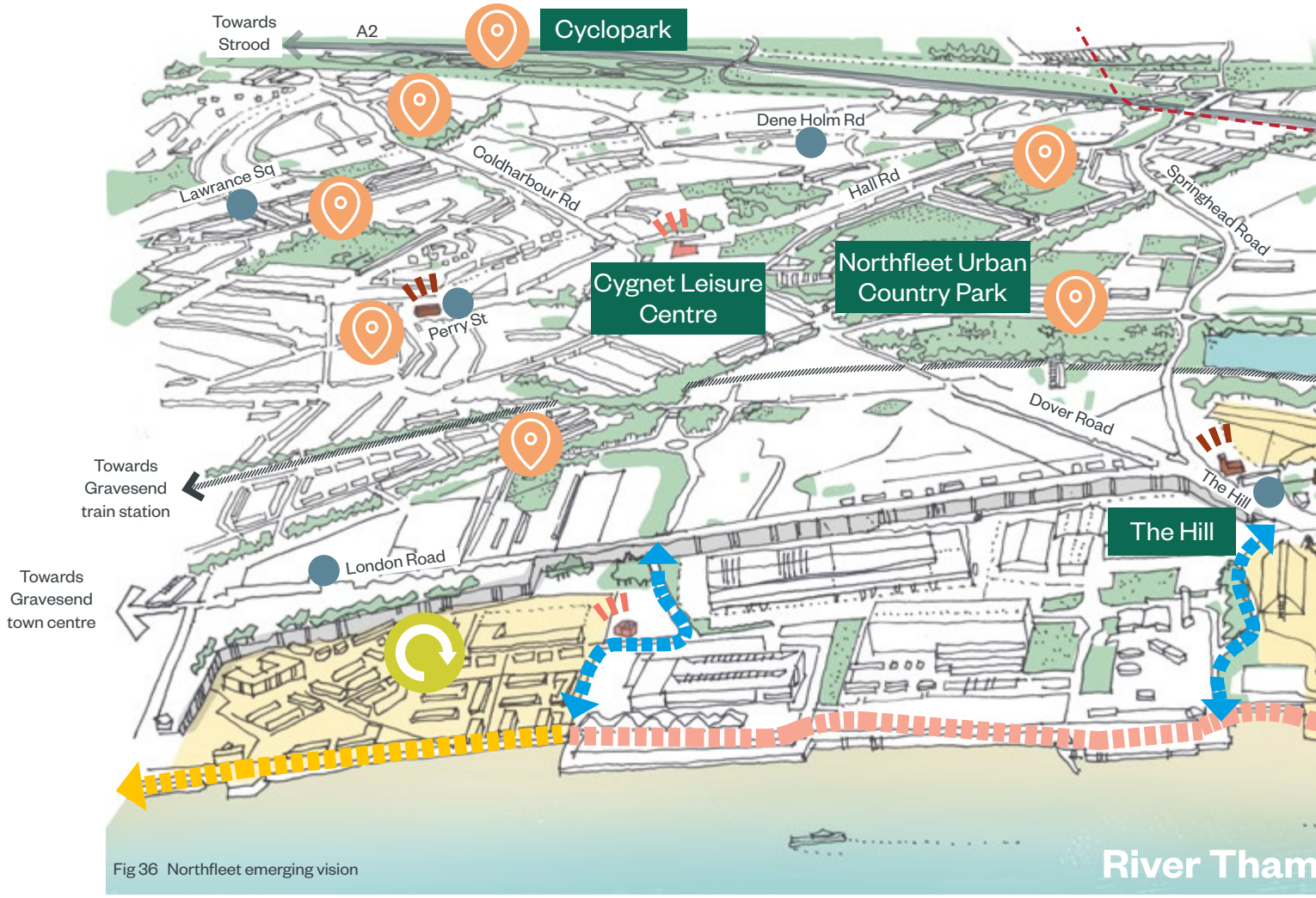


Fig 36 Northfleet emerging vision

travel.

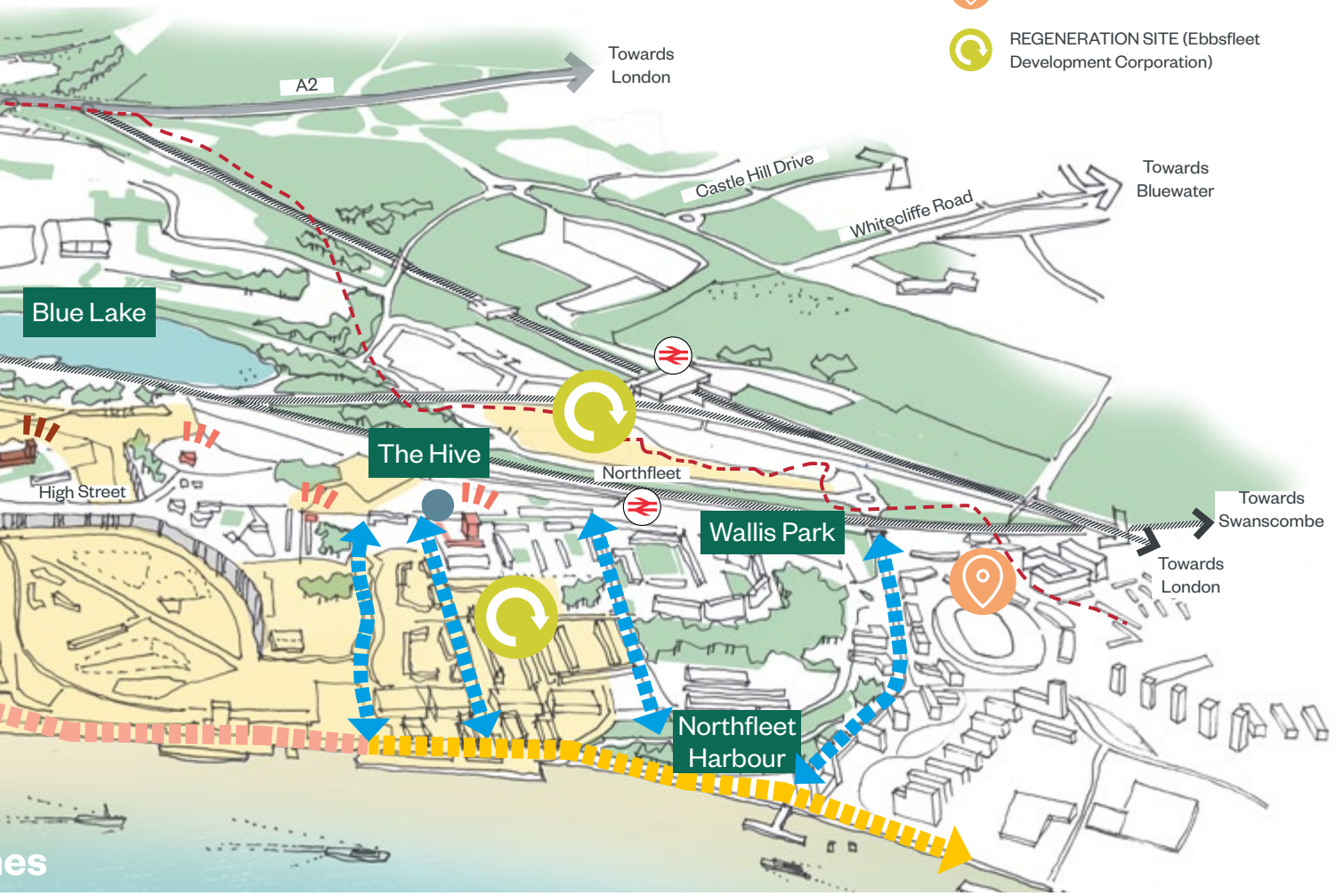
j. Protect and enhance the **heritage assets** including Gravesham's enduring industrial heritage.

k. Improved **connectivity** between the urban area and surrounding countryside to tackle severance caused by infrastructure

l. Promotion of new housing that can cater to an ageing population following the **HAPPI principles** (Housing for an Ageing Population Panel for Innovation).

m. Promotion of **retrofit** of existing building stock where appropriate to improve resilience against climate change.

n. Promotion of **tree planting and Sustainable Drainage Systems (SuDS)** to reinforce links with surrounding nature and countryside.



3
Future

3.11 Future for the rural areas?

a. Promote a **sustainable network of unique villages** co-locating key community facilities and commercial activities and better connected by pedestrian and cycling routes and by excellent, cost-effective public transport.

b. Improved **pedestrian and cycling permeability** throughout each village with legible streets and new markers and environmental features to aid navigation.

c. Reinforced and **welcoming village centres** to strengthen community identity, local economy and pride of belonging.

d. Improved **settings of heritage assets.**

e. Promoting a **contextual architecture** that talks to the heritage and character of each unique village.

f. Rural villages to play a fundamental role as **gateways to Gravesham's unique and outstanding nature** such as Kent Area of Outstanding Natural Beauty with benefits for the local economy and tourism.

g. An improved **play** offer for children through play on the way, safer streets and improved playgrounds.

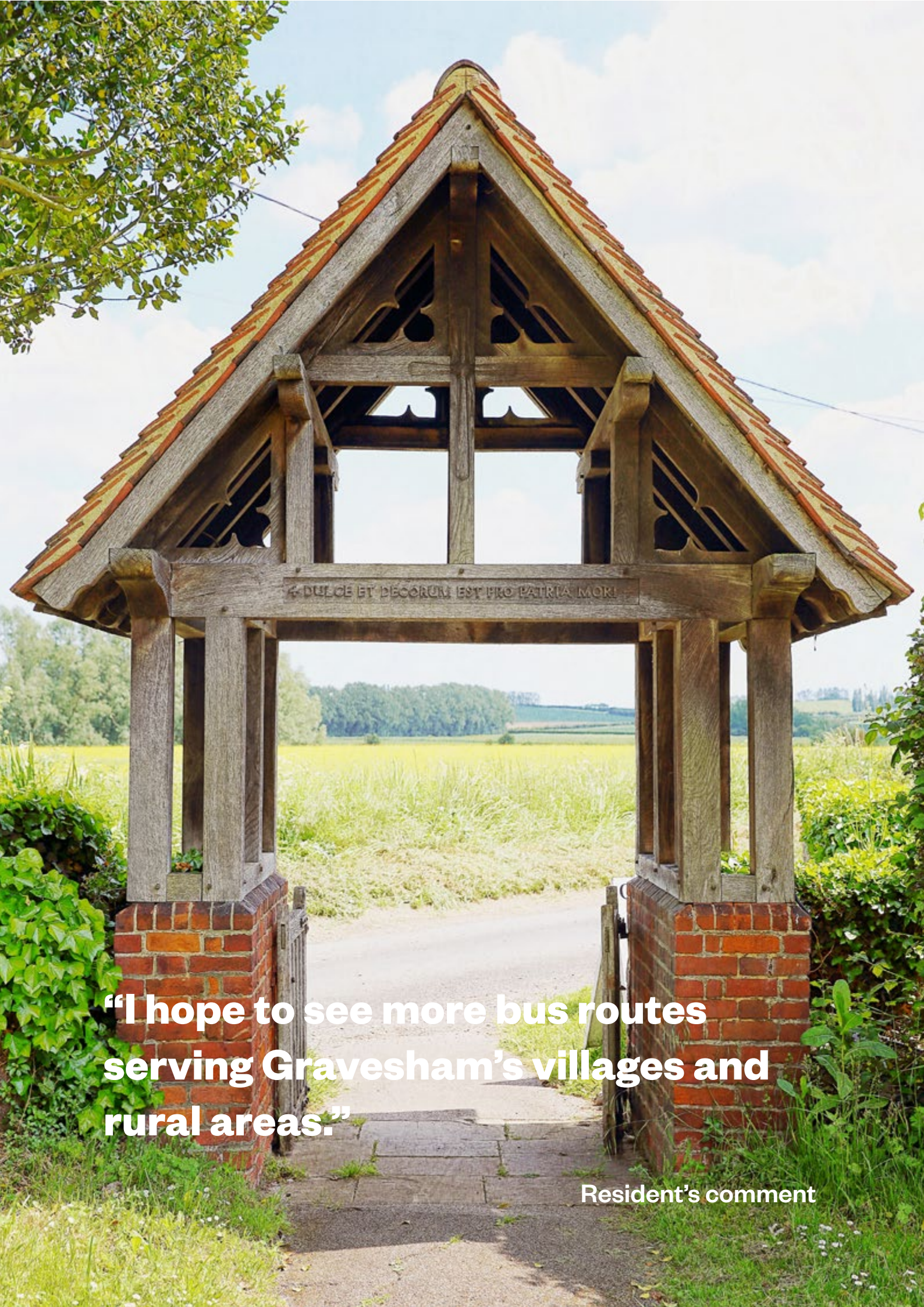
h. An improved network of **open spaces** to promote outdoor activities and sports for all ages.

i. Promotion of villages with new housing that can cater to an ageing population following the **HAPPI principles** (Housing for an Ageing Population Panel for Innovation).

j. Promotion of **retrofit** of existing building stock where appropriate to improve resilience against climate change.

k. Promotion of **tree planting and Sustainable Drainage Systems (SuDS)** throughout each village to reinforce links with surrounding nature and countryside.

l. Valuing and strengthening Gravesham's **rural economy** and its contribution to the overall local economic growth.



“I hope to see more bus routes serving Gravesham’s villages and rural areas.”

Resident’s comment

3.12 Design Principles

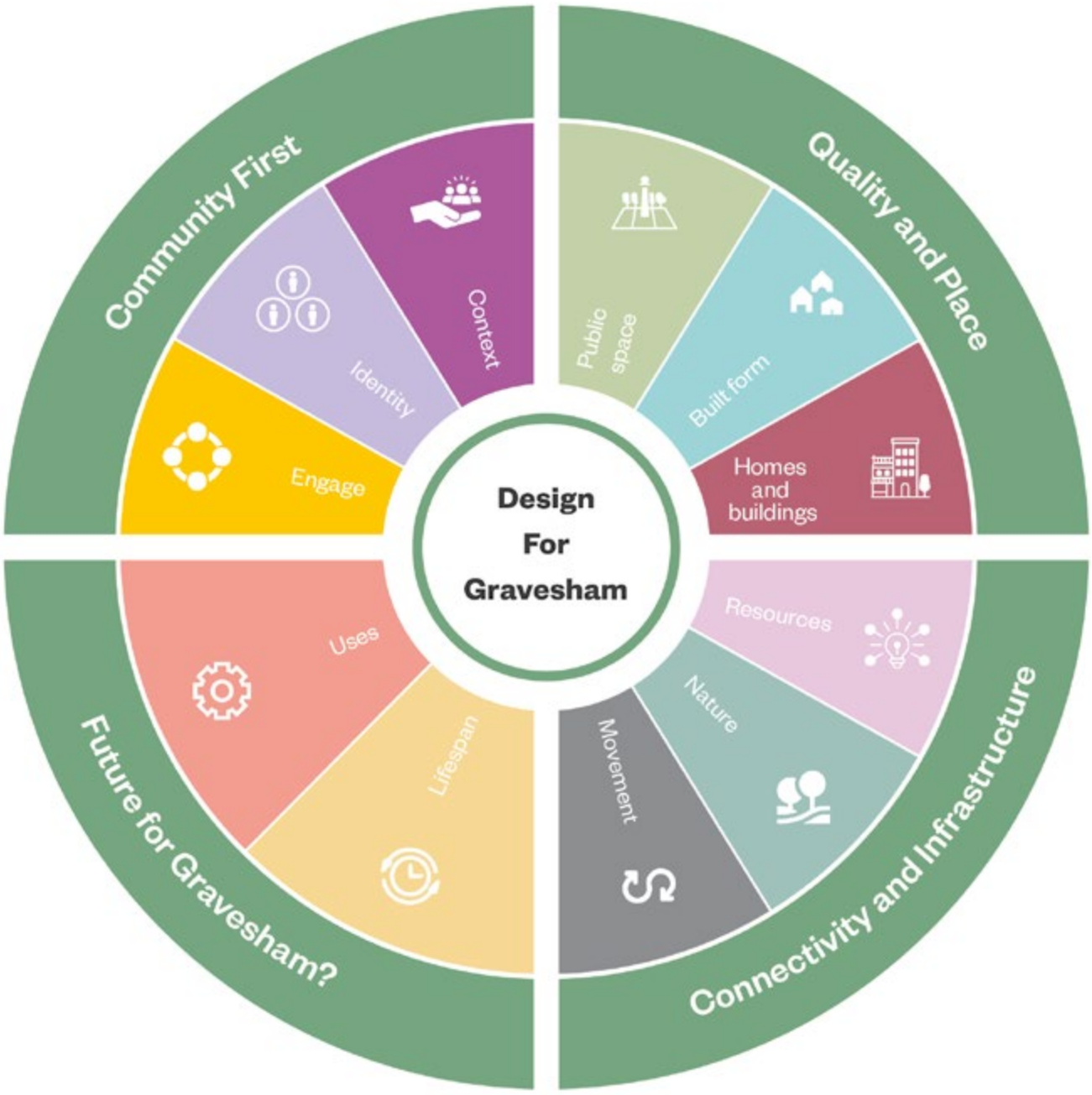


Fig 37 Design Principles

Design principles

Engage

- Responding to the local community

Identity

- Enhance and contribute to local identity

Context

- Responding to local history and context

Public Realm

- Public space
- Play
- Surface finishes
- Inclusive design & accessibility
- Street furniture
- Lighting
- Wayfinding
- Community-led art

Built Form

- Pattern, grain and scale
- Height
- Tall buildings
- Density
- Building lines
- Thresholds and frontages
- Roofscape
- Elevations and key corners
- Materials

Homes and buildings

- Space standards for dwellings
- Aspect, orientation, daylight and sunlight
- Private and communal amenity
- Balconies

Movement

- Public transport and active travel
- Streets
- Vehicular parking
- Servicing
- Cycle parking

Nature

- Protecting and enhancing blue and green infrastructure
- Open spaces and green corridors
- Biodiversity
- Sustainable Drainage Systems (SuDS)
- Planting
- Trees
- Adjacency to riverside

Resources

- Energy efficiency and resilience
- Retrofit first

Uses

- Rich-mix of opportunities

Lifespan

- Management and maintenance

“The town centre needs strong investment and local businesses need more support.”

Resident’s comment

4

Community First

4
Community First

Promoting meaningful community engagement and ways to empower community in the development and delivery of new buildings, spaces and sustainable and cohesive neighbourhoods.

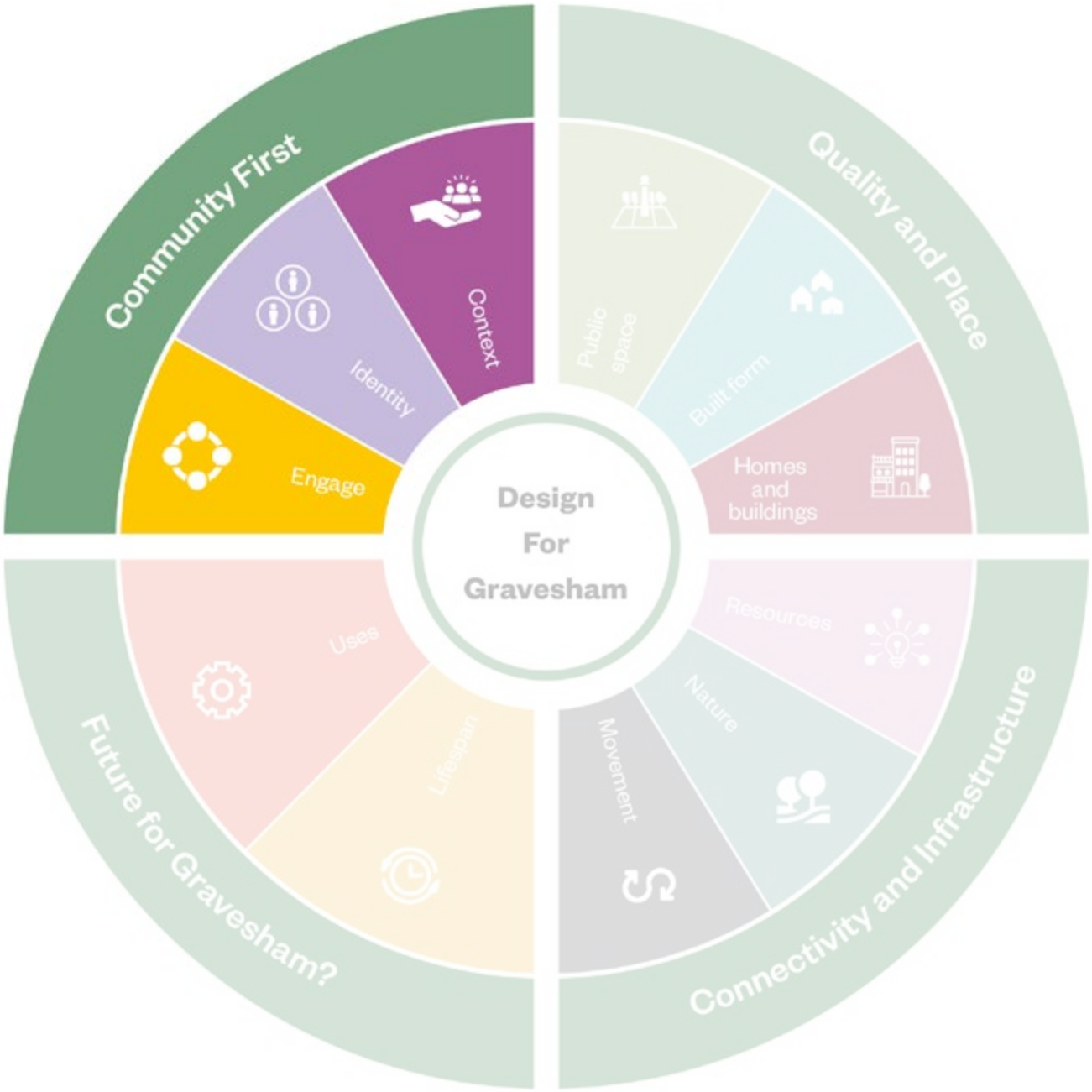


Fig 38 Design Principles: Community First

Design principles

Engage

Responding to the local community

The Design Code strongly promotes community engagement in the creation of sustainable and cohesive places and neighbourhoods.

Identity

Enhance and contribute to local identity

Gravesham is a great Borough with an incredible community and collection of unique places and neighbourhoods. Place makers should respond to unique local identity and character.

Context

Responding to local history and context

Gravesham has a unique character and heritage that is to be respected in the development of contextual design responses.

4
Community First

4.1 Responding to the local community

Engage

4.1.1 Gravesham is a Borough that is recognised and celebrated for its diverse and cohesive communities.

4.1.2 Community engagement benefits the project as it helps to work effectively with diverse communities, neighbourhoods and interest groups.

4.1.3 The Council is committed to being a listening Council, reaching out to all communities. Any design proposals put forward by an applicant must reflect this commitment and engage positively with the community.

Design principle 4.1
Responding to the local community

a. When required to validate a planning application, applicants **must** engage with the local community throughout the design process. Engagement can happen via diverse methods (e.g. online surveys, in-person events and/or focus group workshops).

b. When community engagement is carried out, new development **must** respond to the community needs and aspirations which are material planning considerations.

c. New development **should** support community cohesion, inclusion and equality.

d. Applicants of major developments **should** demonstrate a clear understanding of local issues that their design proposals **should** aim to, directly and indirectly, address (e.g. delivering specialist accommodation, affordable housing, local jobs, public realm improvements, transport improvements, provision of local infrastructure and services).

Fig 39 Local businesses in Gravesham

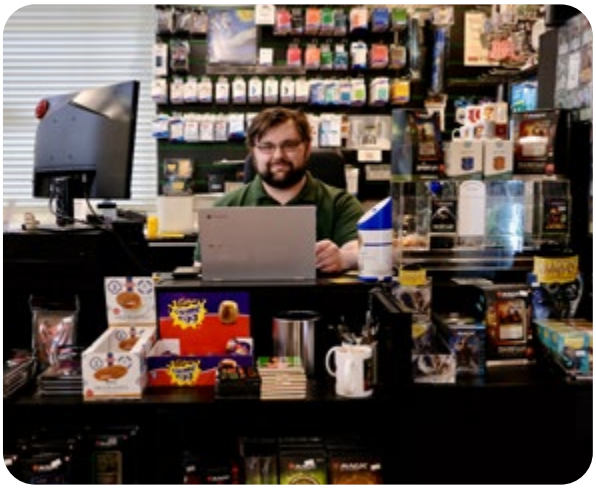


Fig 40 Local businesses in Gravesham

Fig 41 Local businesses in Gravesham

Fig 42 Local businesses in Gravesham

Fig 43 Local businesses in Gravesham

Fig 44 Local businesses in Gravesham

Identity

4.2 Enhance and contribute to local identity

4.2.1 Gravesham is a collection of towns and villages each with its own unique character and neighbourhoods.

4.2.2 These identities are key assets that must be celebrated, strengthened and positively utilised to help realise the Borough's sustainable growth.

4.2.3 The Borough's diverse landscapes, towns and villages comprise a range of characteristics and environments, which over time have created Gravesham's identity.

4.2.4 This identity has evolved as the Borough has inherited centuries of development, each leaving their own legacy, from the Victorian and Georgian town centre of Gravesend to the industrial heritage along Northfleet Riverside, from the historical villages of Cobham and Meopham to the more recent villages of Vigo and Culverstone Green.

4.2.5 This evolution continues today with the growth of modern housing developments and the sensitive conservation and enhancement of the Borough's unique heritage assets.

Design principle 4.2
Enhance and contribute to local identity

a. Development **must** positively respond to Gravesham's diverse identities and to the cultural and socially distinct characteristics of the surrounding areas.

b. Development **must** engage, enhance and celebrate the surrounding environment and community, whilst meeting the needs of all its occupants and users.

c. Development **must** enrich and reinforce local identity to ensure it remains resilient to today's and future challenges.

d. Development **must** reinforce or promote a place-specific local identity. Applicants **must** use the Design and Access Statement to demonstrate how this has been achieved.

e. Applicants **should** consider integrating appropriate "meanwhile uses" in their development phases to avoid plots remaining vacant for long periods of time and negatively impacting on surrounding communities, their feeling of belonging and identity.

Fig 45 Our Lady of the Assumption Church, Northfleet

4.3 Responding to local history and context

4.3.1 Gravesham's history and heritage dates back to Roman times and before, as confirmed by the Borough's numerous conservation areas, listed buildings and ancient monuments. Heritage assets are also integral to the Borough's tourist offer.

4.3.2 Well-designed development makes a positive contribution to its context, strengthening local distinctiveness and a sense of place. This is achieved through careful observation and analysis of the site's setting at the start of the design process.

4.3.3 The National Design Guide (2021) sets out the significance of contextual design.

"An understanding of the context, history and the cultural characteristics of a site, neighbourhood and region influences the location, siting and design of new developments. It means they are well grounded in their locality and more likely to be acceptable to existing communities. Creating a positive sense of place helps to foster a sense of belonging and contributes to well-being, inclusion and community cohesion.

Well-designed places are:

- *Based on a sound understanding of the features of the site and the surrounding context, using baseline studies as a starting point for design;*
- *Integrated into their surroundings so they relate well to them;*
- *Influenced by and influence their context positively;*
- *Responsive to the particular social fabric of the area;*
- *Responsive to local history, culture and heritage."*

(National Design Guide, 2021)

Design principle 4.3
Responding to local history and context

a. New development **must** be place specific and contextual.

b. Applicants **must** start their design process from an analysis of the site context with regard to development pattern and scale, landscape character, heritage assets, green and blue infrastructure, key views from the site and locally prevalent materials.

c. Applicants **must** demonstrate a good understanding of the character area and policy context of their site in the Design and Access Statement.

d. Each new development **must** enhance and not detract from the existing or emerging character of the area where it is situated.

e. Design proposals **must** respect and enhance the settings of all heritage assets, including non-designated heritage assets and key views of heritage landmarks.

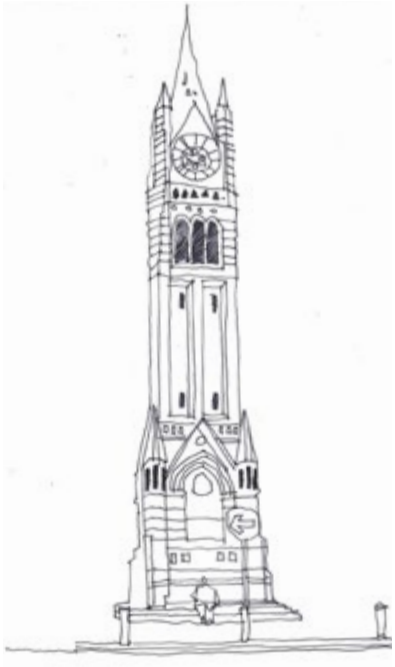


Fig 46 Gravesend Clock Tower

“Harmer Street is undervalued. I would like to see less cars and more trees and planting”

Resident’s comment

5

uality and Place

5
Quality and Place

Improving the quality of new buildings and spaces that best deliver for community, climate and character, with Gravesham's unique heritage, character and identity at the heart.

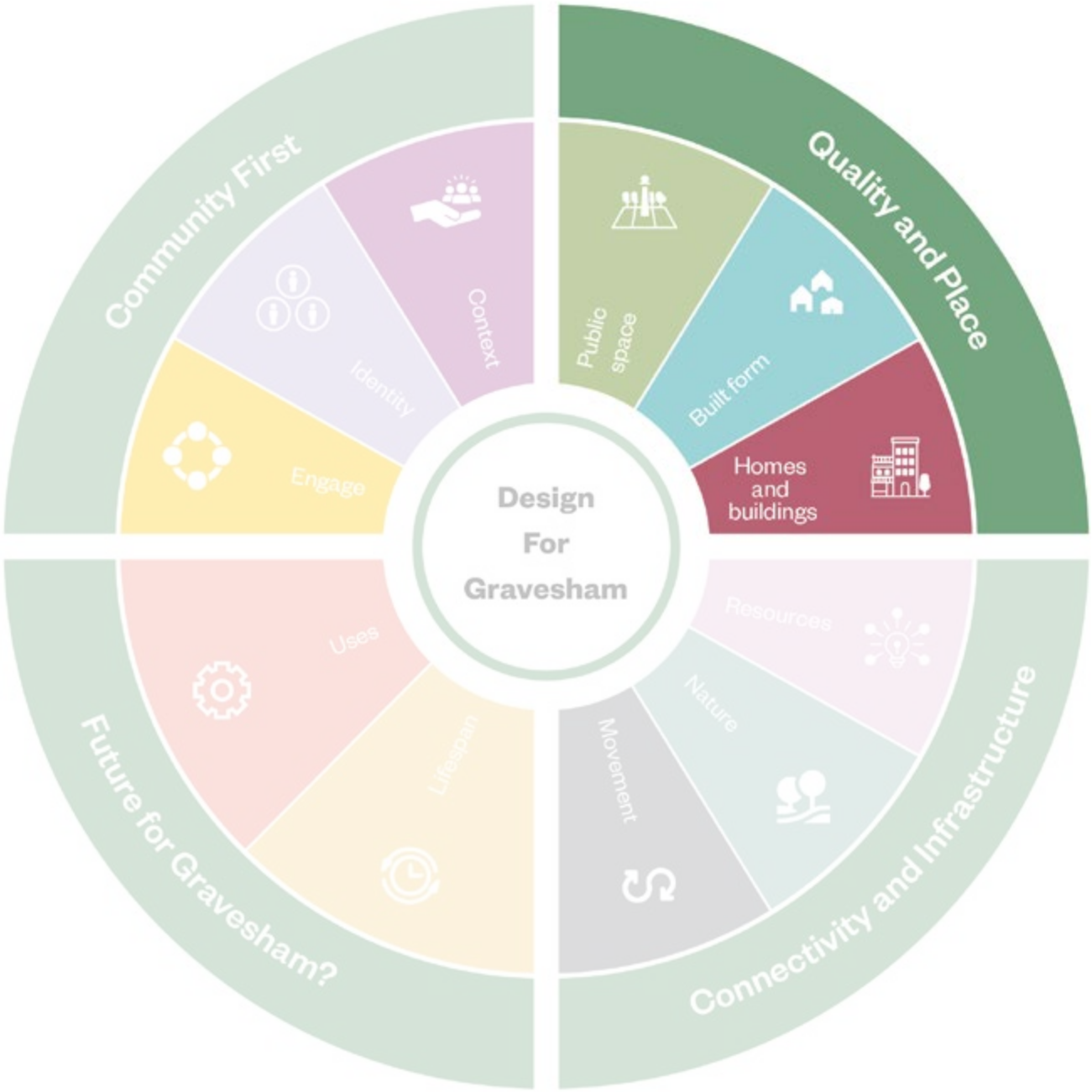


Fig 47 Design Principles: Quality and Place

Design principles

Public Realm

Enhancing the quality of and access to public space to support health and well-being and vibrant local centres.

- Public space
- Play
- Surface finishes
- Inclusive design and accessibility
- Street furniture
- Lighting
- Wayfinding
- Community-led art

Built Form

Enhancing the overall quality and coherence of the built environment

- Pattern, grain and scale
- Height
- Tall buildings
- Density
- Building lines
- Thresholds and frontages
- Roofscape
- Elevations and key corners
- Materials

Homes and buildings

Supporting quality new homes and spaces that respond to community, climate, character.

- Space standards for dwellings
- Aspect, orientation, daylight and sunlight
- Private and communal amenity
- Balconies

5
Quality and Place

5.1 Public space

Public Realm

5.1.1 Public spaces can be freely accessed by the general public. Well-designed public spaces have the ability to improve the identity of a neighbourhood and reinforce a sense of belonging to a place. The distinctiveness and sense of place is one of the greatest assets of a town and local centre. All of Gravesham's town and local centres are different and therefore requires contextual design proposals.

Fig 48 Public spaces should respond to the movement patterns of its users, through desire lines and relationships with surrounding streets and public transport

Fig 49 Meanwhile uses can be integrated into a range of spaces and can unlock activity in less visited or underutilised areas

Design principle 5.1

Public space

a. Local access groups **must** be involved at early design stages to inform design proposals for inclusive access in town centre and civic style spaces.

b. The dimensions of a public space **should** be proportional to the buildings around it and consideration **should** be given to orientation, shape and size of the space. Lower rise buildings should be located to the south or south west to allow good levels of sunlight into the public space.

c. Where appropriate, a public space **should** be framed by buildings which front onto and have easy access off the public space. Multiple uses are encouraged to activate a public space and promote varying activities throughout the day promoting both a day and night time economy.

d. A study of the needs, orientation and pedestrian movement **should** be carried out to understand the desire lines and opportunity to draw people through a space.

e. Public realm elements such as lighting, seating and soft landscaping **should** be carefully considered to encourage routes through and create dwell time spaces.

f. A successful public space is one that allows multiple activities to happen. Street furniture, planting and trees **should** be located to allow flexibility of use and meanwhile uses. This can take many diverse forms and can bring spontaneity, dynamism and activity into public spaces, whilst also providing shade and cooling to address climate change.

g. Development proposals **should** create public spaces that are inclusive (inviting, safe and usable for all) and their design features **should** encourage interaction between residents and with people of the wider neighbourhood.

h. Applicants **should** prioritise biodiversity richness and promote the inclusion of new habitats in their design proposals.

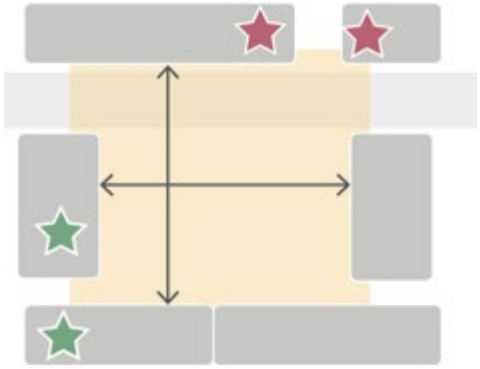


Fig 50 Scale and dimension: The dimensions of a public space should be proportionate to the buildings around it and consider the orientation. Lower rise buildings (green stars) should be located to the south or south west. Taller buildings (red stars) should be located to the north or north-west.

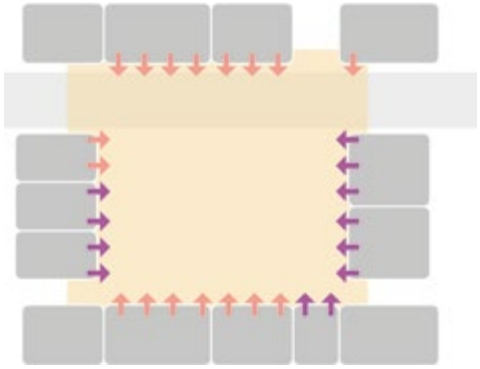


Fig 51 Active frontage: A public space should be framed by buildings which front onto it. Multiple uses are encouraged to activate the public space and promote varying activities.

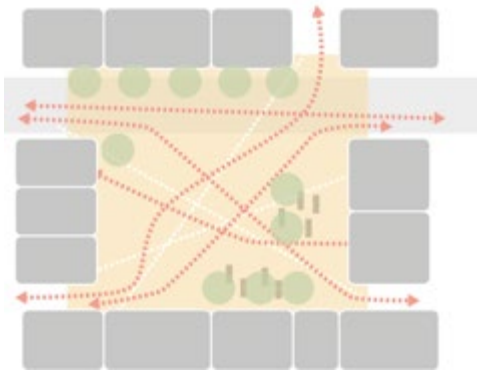


Fig 52 Movement: A study of the needs, orientation and pedestrian movement is important to design a public space.

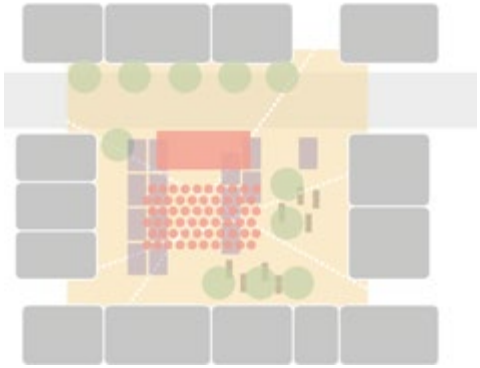


Fig 53 Flexible space and meanwhile use: A successful public space is one that allows for multiple activities to happen. Street furniture, planting and trees should be located to allow flexibility of use.

Fig 54 Diverse shop fronts to welcome in passers-by and create visual interest along the street (Gravesend High Street)

Fig 55 A central public realm space which responds to the proportion and dimension of the surrounding built fabric

5.2 Play

Public Realm

5.2.1 Play is an essential part of every child's life and is vital for the enjoyment of childhood as well as social, emotional, intellectual and physical development.

5.2.2 Play spaces aim to encourage children and young people's independence thanks to the design of safe, secure, accessible and naturally supervised places.

5.2.3 Seeing children at play is sign of a healthy community, reducing likelihood of childhood obesity and helping children become accustomed to having 'active' lives from an early age.

5.2.4 Playful features should be strategically integrated into the landscape and public realm to ensure an inviting connection to the outdoor environment and where possible a 'closeness to nature' to capture mental health and well-being benefits.

5.2.5 Design for play should acknowledge and support the fact that children play in a myriad of different ways - reflecting their physical, mental and neurological needs.

Fig 56 This playground is dominated by fencing, offers limited play experiences and does not integrate any planting or landscape features

Design principle 5.2

Play

a. Play space design **must** meet Play England's recommendations:

- be 'bespoke' - designed for its setting
- be well located
- make use of natural elements
- provide a wide range of play experiences
- be accessible to both disabled and non-disabled children
- meet community needs
- allow children of different ages to play together
- build in opportunities to experience risk and challenge
- be sustainable and appropriately maintained
- allow for change and evolution

b. Informal and incidental opportunities for play **must** be embedded within the design of neighbourhood streets, local streets and open spaces.

c. Play spaces **must** be provided in accessible locations, well overlooked by homes.

d. The design of outdoor sport, play and informal open space **must** meet the Fields in Trust Guidance for Outdoor Sport and Play.

e. Play **must** include a range of equipment that offer inclusive and accessible play experiences for all.

f. A diverse range of children and young people in the local community **must** be consulted at the early stage of design to understand their needs and tailor the brief.

g. Play spaces **should** provide durable equipment and be suitable for the intended age or user group (age for SEND play users is less attributable).

h. Areas for age-appropriate activities for teens and older children **should** also be considered.

Fig 57 Play integrated within a central green space

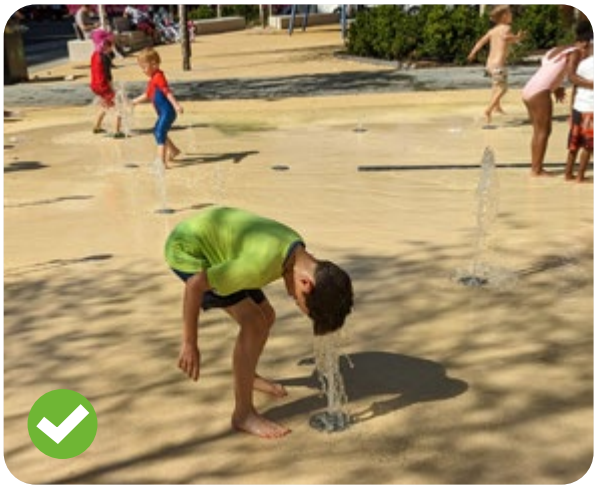


Fig 58 Water features can encourage play as well as supporting civic-style public spaces

Fig 59 Play should consider different age groups and abilities

Fig 60 Natural play should be integrated with landscape design features

Fig 61 Playscapes should not be over-programmed but should also allow for child-led flexible play

Fig 62 Play equipment in more civic spaces could consider sculptural forms with a palette that complements the surrounding public realm

5.3 Surface finishes

Public Realm

5.3.1 The use of high-quality, robust and appropriate materials can have a significant impact on the character and perception of the public realm in Gravesham's towns and villages.

5.3.2 Hard material palettes should reinforce the character and place-making objectives of a place, whilst also responding to maintenance, budget and function.

5.3.3 The size and extent of hard materials should be balanced with moments of greening through planting and trees to ensure a pleasant micro-climate.

5.3.4 An emphasis on simplicity and the avoidance of overly detailed hardworks design is generally seen to be successful.

5.3.5 Surface finishes should highlight thresholds including vehicular routes and the delineation between public/private pedestrian areas.

Design principle 5.3

Surface finishes

a. Hard landscape design **must** promote accessibility and legibility for all ages and abilities.

b. Hard landscape design **must** be high quality, robust and fit for purpose.

c. Hard landscape materials **must** reflect the local context and complement the materiality of the proposed and existing architecture (where present).

d. Areas of the public realm that are to be adopted **must** meet the Highway Authority's approved specification. The specification is to be interpreted as a minimum, not a ceiling.

e. Surface finishes **must** be chosen based on suitability as well as their ease of maintenance, repair and replacement.

f. Permeable surfaces **should** be considered to help with drainage/surface water flooding wherever reasonably practicable in consideration of contamination risk.

g. Choice of materials for paved areas **should** reflect the hierarchy of the streets and spaces. Areas of planting **should** be integrated into paved areas to break down large expanses of paving which can be austere away from civic-type spaces.

h. The sustainability credentials of surface materials **should** be considered at the outset of the design (e.g. embodied carbon, recycled content and ease of renewal).

i. Permeable surface finishes **should** be prioritised where appropriate.

j. Contrast in colour or materiality **should** be used when it serves a purpose (e.g. to delineate or zone activities, indicate key routes or to highlight spaces).

Fig 63 Robust, traffickable pre-cast concrete units convey a pedestrian focus within spaces where slow-speed vehicles may be permitted

5.4 Inclusive design and accessibility

5.4.1 Good public space design considers the principles of inclusive design as it aims to create spaces that can be accessed and used by as many people as possible, regardless of age, gender, culture, income and disability.

5.4.2 The Council works with the Gravesham Access Group, a local organisation set-up to promote access for all and to raise awareness of the everyday challenges that people with disabilities face.

5.4.3 Disability includes anyone who has a physical or mental impairment and where the impairment has a substantial and long-term adverse effect on the person's ability to carry out normal day to day activities. Disability can include, for example, people with multiple sclerosis, visual impairments, dementia, Alzheimer or physical impairments.

5.4.4 Inclusive design aims to remove barriers that create undue effort and separation. It ensures equity of use, enabling everyone to participate equally, confidently and independently in everyday activities.

5.4.5 The former Commission for Architecture and the Built Environment (CABE) has set the key principles of inclusive design:

- **Inclusive** so everyone can use them safely, easily and with dignity.
- **Responsive** taking account of what people say they need and want.
- **Flexible** so different people can use them in different ways.
- **Convenient** so everyone can use them without too much effort or separation.
- **Accommodating** for all people, regardless of their age, gender, mobility, ethnicity or circumstances.
- **Welcoming** with no disabling barriers that might exclude some people.
- **Realistic** offering more than one solution to help balance everyone's needs and recognising that one solution may not work for all.

Design principle 5.4

Inclusive design and accessibility

a. Inclusive design **must** be considered from the outset of the design process.

b. Public realm **must** be safe and encourage social interaction.

c. Public realm **should** be designed to reflect the diversity of people using the space, and must be 'accessible to all'.

d. Inclusive design **should** be through large-scale as well as detailed considerations such as: blister tactile paving at crossing points, dropped kerbs for level access, adequately wide pavements, visual contrast in vehicular thresholds, guidance strips and well-placed street furniture avoiding clutter for mobility and visually impaired people.

e. Seating areas at regular intervals within the public realm and along key pedestrian routes **should** be provided. Seating **should** offer a combination of arms, backrests and varied seating heights with space for wheelchairs to also be used.

f. Public realm **should** provide 'sensory richness' through varied planting with tactile qualities, trees and moments for shade and rest.

g. Areas of 'retreat' in more quiet locations **should** be integrated for neurodiverse residents and visitors to pause away from busy areas and thoroughfares.

h. Provision for cycle parking in public realm spaces **should** consider adequate space for adapted bicycles.

5.5 Street furniture

Public Realm

5.5.1 Good design and beauty is key to the delivery of successful development and this should be a fundamental aspect of any planning application. The Council is keen to ensure that applicant's take account of street furniture design proposals in line with this design code from the outset, whilst acknowledging that final approval of details may in some instances only occur as part of reserved matters or as part of the discharge of planning conditions.

5.5.2 Street furniture is objects placed or fixed in the street for public use. A considered, co-ordinated palette of street furniture can positively reinforce character and improve accessibility of Gravesham's streets and public spaces.

Fig 64 A variety of seating conditions to suit a wide demographic

Fig 65 Attractive and durable street furniture located to promote interactions between neighbours

Design principle 5.5
Street furniture

a. Street furniture **must** be from a constrained palette with a 'family' of products with simple, robust design of high quality that will endure.

b. The finish and colour of metalwork across the palette **must** be consistent.

c. Street furniture **must** be integrated into landscape design, positioned to avoid clutter and maintain clear routes.

d. Regular seating opportunities **must** be provided to promote inclusive access, with varying seating heights, and regular incorporation of arms and backrests.

e. Seating **should** be overlooked in positions that consider wayfinding, adequate lighting, shade in summer months and avoidance of wind exposed areas.

f. Street furniture **should** be proprietary and easily replaced, bespoke items **should** be used where they are made of materials that can endure with zero maintenance over the lifetime of the bespoke item. Such items add value to place making and enhance public spaces.

g. Vehicular access control **should** avoid a clutter of bollard types that can become unsightly, obstructive and a maintenance issue.

h. Bin provision (and capacities) **should** be adequate and in convenient locations to support a litter free environment. Options for recycling should be included where possible. Dog waste can generally be combined into general litter bins avoiding additional dog litter bins.

i. Street furniture **should** be combined with lighting columns to reduce clutter.

j. Riverside developments **should** include provision of riparian lifesaving equipment where necessary to facilitate safe and active use of the riverfront.

Street furniture examples

Fig 66 FSC certified hardwood timber bench with arms and backrest in a consistent colour palette

Fig 67 FSC Certified hardwood timber seat with arms and backrest in a consistent colour palette

Fig 68 FSC certified hardwood timber seating walls with sections including arms and backrests

Fig 69 Black cycle stand with cross-bar for info graphics/signs and reflective strips

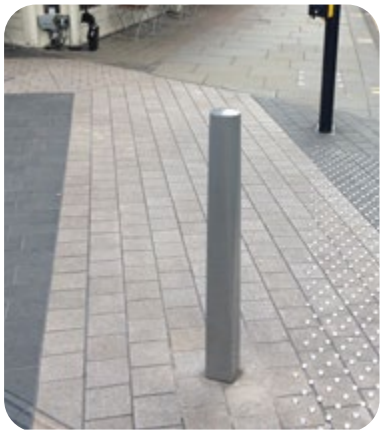


Fig 70 Slim yet robust static bollards in consistent colour palette with demountable option

Fig 71 Robust litter bins of adequate capacity with options for recycling and cigarette plate

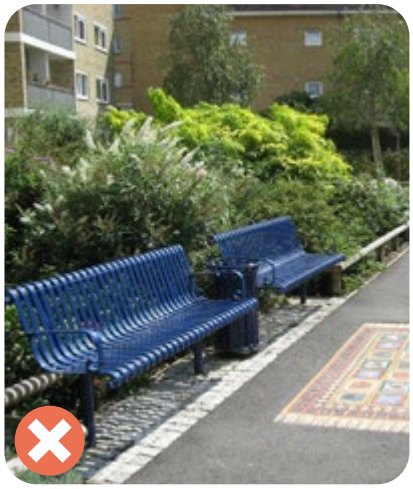


Fig 72 Avoid street furniture with bins placed too close to seating areas

Fig 73 Street furniture should comprise a 'family' palette for a consistent or complementary style/material

5.6 Lighting

Public Realm

5.6.1 Good design and beauty are key to the delivery of successful development, and this should be a fundamental aspect of any application. The Council is keen to ensure that applicant's take account of lighting design proposals from the outset, whilst acknowledging that final approval of details may in some instances only occur as part of reserved matters or as part of the discharge of planning conditions.

5.6.2 The majority of Gravesham's residents who completed the online survey would like to see public lighting improved in their neighbourhood. Adequate lighting to streets and routes is important for the safety and amenity of the public realm throughout the hours of darkness.

5.6.3 Lighting should also be used to contribute to the character of an area, to add drama or distinctiveness, and to enrich the urban experience. Public realm design should consider the different facets and opportunities of lighting provision to enhance the quality and distinctiveness of an area.

5.6.4 Adverse impacts of poor lighting solutions on residential amenity and natural habitats need to be understood and avoided.

5.6.5 Poor lighting examples include an excess of clutter of posts in the public realm which is both unsightly and obstructive. Building-mounted luminaries help avoid this issue.

5.6.6 Lighting should be directed to 'useful' areas and avoid light trespass. Glare can be significantly detrimental to local ecosystems and negatively impact both human and wildlife health.

5.6.7 Developments should consider external lighting holistically to balance between the provision of uniform site lighting and the impacts of light pollution on the local area and wildlife.

Design principle 5.6
Lighting

a. Proposed lighting **must** create a welcoming, safe and human-scale environment which encourages residents to use outdoor spaces.

b. Lighting **must** enhance the architecture and open spaces and reinforce the different character areas across Gravesham.

c. Lighting **must** contribute positively to feelings of safety and security through the use of low-glare, warm white tones and good levels of consistency.

d. Lighting **must** be directed away from residential windows.

e. Within the Gravesham part of the Kent Downs AoNB, design proposals **must** protect darkskies.

f. Lighting to riverfront **must not** have a negative effect on river ecology or safe navigation of the Thames.

g. Lighting design **should** consider vertical surfaces including walls, entrances and building façades.

h. Primary footpaths and amenity spaces **should** be adequately lit but routes and spaces of lower status should consider motion-activated lighting.

i. Luminaries **should** be specified for low energy consumption and their position **should** enable easy maintenance.

j. Care **should** be taken to develop strategies that minimise the amount of light pollution and glare caused.

k. Lighting **should** be designed to minimise light pollution, particularly near wildlife habitats, dark landscapes and nature conservation.

l. Street lighting **should** be integrated with other street furniture.

Lighting examples

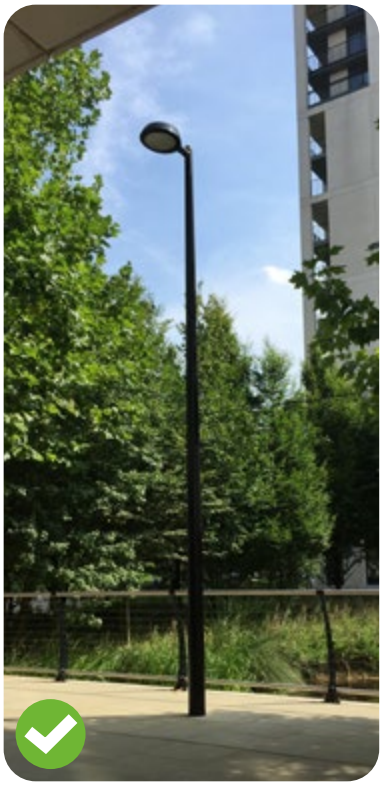


Fig 74 Columns in vehicular areas that are simple, robust, with consistent colours at 5-7m high

Fig 75 Multi-headed columns for civic and pedestrian space with consistent colour

Fig 76 Along pedestrian-only routes, columns drop in height to 3-4m with consistent colours

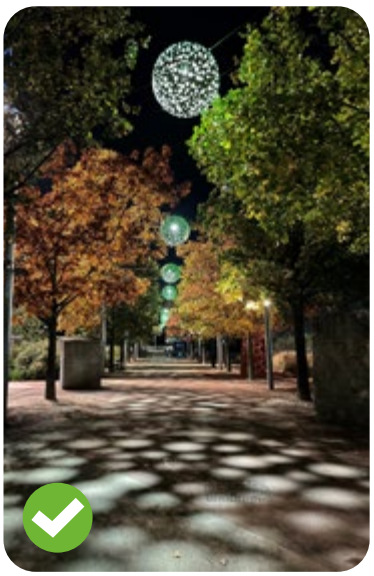


Fig 77 Lighting design illuminating public realm surfaces, avoiding in-ground units

Fig 78 Bollard-style lighting can contribute to clutter and often become maintenance issues

Fig 79 In-ground lighting fittings can become maintenance issues if not specified correctly

5.7 Wayfinding

5.7.1 Good design and beauty are key to the delivery of successful development, and this should be a fundamental aspect of any application. The Council is keen to ensure that applicant's take account of wayfinding design proposals from the outset, whilst acknowledging that final approval of details may in some instances only occur as part of reserved matters or as part of the discharge of planning conditions.

5.7.2 Wayfinding can help to improve the legibility and accessibility of Gravesham's public spaces.

5.7.3 Wayfinding may include: signage, lighting, public art interventions, street furniture, landmark buildings and historical assets.

Design principle 5.7

Wayfinding

a. Wayfinding **must** meet inclusive design requirements. Refer to 5.4 Inclusive Design and Accessibility.

b. Wayfinding **must** clearly identify means of access to public open spaces and Public Rights of Way.

c. Signage **should** be consolidated to avoid over-cluttering the public realm.

d. The form and materiality of signage elements **should** be consistent across the palette with an emphasis on simplicity, robustness and ease of replacement.

Fig 80 Example of signage integrated with the public realm surface

Fig 81 Standing totems should be used in limited, strategic locations in civic settings

5.8 Community-led art

5.8.1 Good design and beauty are key to the delivery of successful development, and this should be a fundamental aspect of any application. The Council is keen to ensure that applicant's take account of community-led art proposals from the outset, whilst acknowledging that final approval of details may in some instances only occur as part of reserved matters or as part of the discharge of planning conditions.

5.8.2 The Council seeks public art that celebrates the identity of the place, connecting residents with its history, raising awareness of significant issues, events or stimulating civic discourse.

5.8.3 Public art provides opportunities for artist and supports creative industries more widely.

Fig 82 Public art as part of a seasonal calendar of ephemeral events (Gravesham Light Festival)

Fig 83 Public art providing an element of play

Design principle 5.8

Community-led art

a. When incorporated into proposals, public art **must** be integrated within the form and fabric of public realm spaces or buildings and respect the scale of its surroundings.

b. Any public art **must** be specifically designed for a place and contribute positively to the place-making, interest and local character.

c. Applicants **must** engage with the Council to inform the public art brief prior to commissioning an artist.

d. Applicants for large schemes **should** consider voluntarily contributing an appropriate part of their development budget to delivering public art.

e. Applicants **should** involve local residents, schools and the wider community through part or all of the design and implementation process.

f. Applicants **should** collaborate with local artists or design practitioners, where possible, to promote and support local talent and businesses.

g. Applicants **should** consider 'value' and maintenance as a key constraint to design, understanding the available skills and resources for maintenance.

h. The process of developing public art proposals **should** foster and encourage interaction with visitors/local people to provide a sense of ownership.

i. Applicants **should** positively consider site hoardings (used to enclose/secure development sites) as temporary canvasses and/or for community engagement or information.

5.9 Pattern, grain and scale

5.9.1 Pattern and grain refers to the arrangement and size of buildings and their plots in a settlement and the size of street blocks and junctions. Scale is the impression of a building when seen in relation to its surroundings, or the size of parts of a building or its details, particularly when experienced from street level. Gravesham's urban area and villages are characterised mainly by a development pattern made up of individual buildings.

5.9.2 In the Victorian and Edwardian character areas (please refer to Fig.23) buildings are joined up to form terraces, whilst in the inter/post-war and modern suburbs and villages development is mainly short terraces, semi-detached or detached houses and is therefore spaced out along the street.

5.9.3 In inter/post-war housing estates, retail and industrial areas, or larger development ensembles this fine pattern is not common.

5.9.4 The grain and scale of a development, the pattern of buildings, roofscape and building features play a fundamental role in the perception of the quality and consistency of a place.

5.9.5 Places with rhythms of similar patterns of elements will be perceived more coherent and calming, while places where rhythms are frequently broken can feel fragmented.

5.9.6 The grain of buildings is an important feature defining the character of an area and development.

Design principle 5.9

Pattern, grain and scale

a. New development **must** respond sensitively to the prevailing pattern and intervals of existing development to reflect the grain of the existing character area where the building (or larger development) is placed.

b. A coarse development pattern with large monolithic buildings or uniform development frontages **must** be avoided.

c. New development **should** reflect the prevailing pattern of the built form in those areas where there is a cohesive scale and grain such as the town centre, local centres and rural villages.

d. On large regeneration sites along the Gravesham Riverside there will be potential to introduce new development form and massing. Nevertheless, massing **should** create a rhythm of vertically proportioned bays or individual buildings.

e. When a larger developments is proposed, the massing **should** be broken down into smaller proportionate elements that contextually respond to the character of the area and create a human-scaled street scene.

Fig 84 Development introducing a rhythm of vertically proportioned buildings

Fig 85 Façade is broken into smaller bays by dormers and door entrances (Constable Road by BPTW)

Fig 86 Mix of typologies and heights (Pump House by Levitt Bernstein)

Fig 87 Development introducing a consistent scale along a mews street (Chobman Manor by Make Architects)

Fig 88 Set-backs and brick recesses can help articulate the elevation of a building (Great Eastern Buildings by Karakusevic Carson Architects)

Fig 89 Building façade is articulated in bays (Chobman Manor by Make Architects)

Fig 90 Mix of typologies and heights with a consistent material palette (Rochester Riverside by BPTW)

5.10 Height

5.10.1 Height is the measurement of a building from base to top, often expressed in storeys. It is one of the most defining features in a building. Building heights can help to reinforce the hierarchy and legibility of the public realm, emphasise the Borough's topography and create focal points in Gravesham's built form.

5.10.2 The existing height context for a new build is given by Gravesham's style, which takes into consideration the existing heights of neighbouring and nearby buildings, together with the adjoining streets or prevailing heights in the wider area.

Fig 91 Development with a multi-level car park (The Charter in Gravesend by Leslie Jones Architects)

Fig 92 View from Windmill Hill. Proposed developments must consider impact on skyline and key views.

Design principle 5.10

Height

a. Where a development proposes variations in height, that is not consistent with the existing context, applicants **must** assess and evidence the height of existing buildings in the immediate vicinity and the local context (prevailing height). This evidence **must** be used to inform the development proposal and to demonstrate its impact on the local surroundings and the skyline.

b. For small scale infill development where the height of existing buildings along the street is consistent or of minimal variation, new developments **must not** exceed the existing building height level of the adjacent plots along the street.

c. Development **must not** overshadow or compromise the quality of neighbouring buildings.

d. Applicants **should** clearly explain the rationale behind their approach to height and how this responds to the existing context height.

e. Building height **should** not negatively impact air flow and natural light at street level.

Fig 93 Development adjusts to the existing topography (Plough Cottages by Archio)

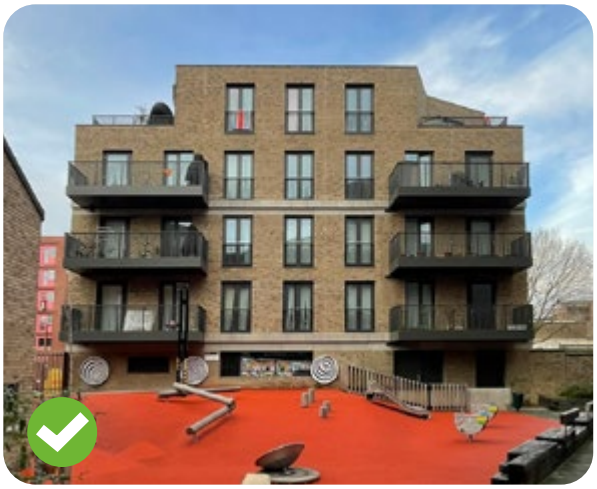
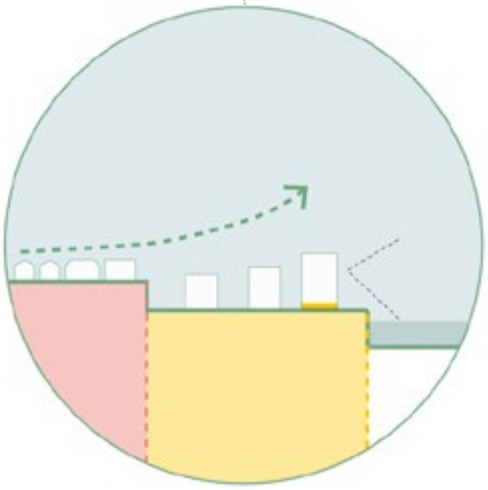


Fig 94 Reducing the massing at top floor helps maximise daylight-sunlight for existing neighbouring buildings. (Bream Street by AHMM)

5.10.3 Proposed heights along the Gravesham Riverside **must** carefully consider key views towards the River Thames from Gravesend's and Northfleet's urban area.

5.10.4 New development along the River Thames **must not** restrict access to the riverside, but enhance public access for all.

5.10.5 New development **should** introduce active uses along the riverside and where appropriate allow use spillage into the public spaces.



Urban area

Riverside brownfield sites

5.10.6 Height of design proposals **must** be contextual and respectful of existing heights.

5.10.7 Subject to detail discussion with Gravesham's planning department, taller buildings in these key place-making areas will be considered acceptable. Proposed heights **must** carefully consider key views towards the River Thames from Gravesend's and Northfleet's urban area. Proposed development **must** be articulated and the massing broken down to allow for sky space between buildings when viewed from Gravesend's and Northfleet's urban area.

Fig 95 Building heights diagrams

5.11 Tall buildings

5.11.1 Taller buildings along Gravesham Riverside through careful design and sighting, where existing important views will not be negatively impacted, will help form visual landmarks.

5.11.2 A tall building is classified as any building that is significantly taller than its local context and/or has a significant impact on the skyline. Within the Borough, buildings of more than 18 metres, or those which are more than twice the height of surrounding buildings (whichever is less) will be considered to be a tall building.

5.11.3 Where proposals for new development introduce tall buildings which exceed the prevailing height and context, developers must follow specific design principles for tall buildings.

Design principle 5.11

Tall buildings

a. New development **must** be of exemplary design quality. This includes considerations of height, massing, proportions, materials, detailing, site layout and its relationship with the surrounding context, positively contributing toward the character of the area.

b. A clear townscape rationale **must** be provided for the specific sighting of taller buildings, marking key locations or assisting with wayfinding to and from nodes, and responding to public transport accessibility and activity.

c. New development **must** be designed to avoid harmful impacts on daylight, sunlight, wind conditions, overheating and micro-climate, and include the provision of appropriate mitigation where required.

d. The NPPF (2023) requires new developments to promote sustainable transport modes taking into account the type of development proposed and it's location. In accordance with the NPPF and National Design Guide the setting of new development **must** not be dominated by parking for vehicles and harm quality of place. Proposals should also avoid detrimental parking impacts on the existing road network.

Fig 96 Design proposals for tall building along Gravesham Riverside (Clifton Slipways by Guy Hollaway)

Fig 97 Design proposals for tall buildings along Gravesham Riverside (Albion Waterside by JTP)

5.12 Density

5.12.1 Density is the measure of development on a specific site or geographical area. For residential uses the number of residential units per hectare is often used as a measurement.

5.12.2 It is important that new developments identify, through contextual analysis and options appraisal, the most appropriate density that optimises the capacity of the site with regard to its location and context.

5.12.3 Higher densities (residential/employment/mixed use) will be considered acceptable within the Gravesham Riverside Regeneration Sites as illustrated in Fig. 100-101.

5.12.4 Opportunities for higher density (residential/employment/mixed use) will be also acceptable in key Regeneration Sites within Gravesend Town centre as illustrated in Fig.100-101.

5.12.5 Elsewhere within the borough, low to medium density development can be considered providing that is contextually appropriate and sensitive to its surroundings and character of the area.

Design principle 5.12

Density

a. Applicants **must** follow a design-led approach to achieve an appropriate density of development for the site.

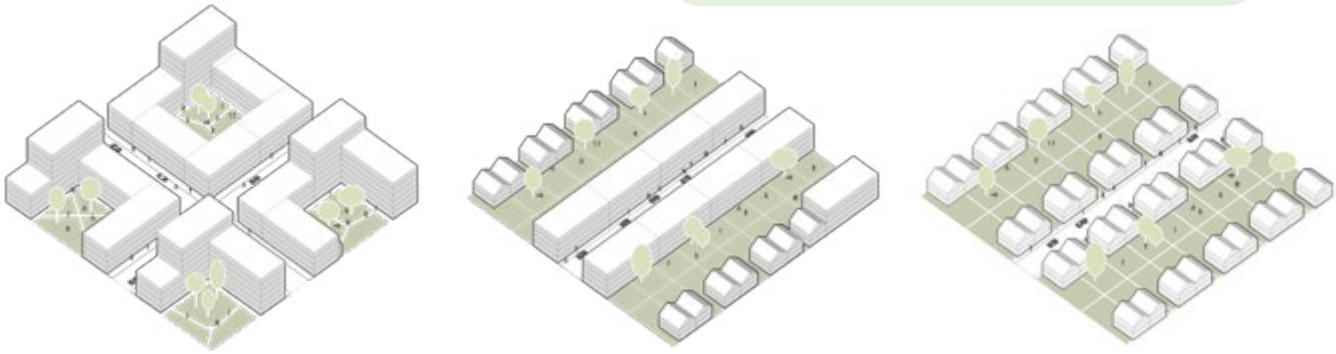
b. Applicants **must** justify the proposed density through a contextual assessment of density within the Design and Access Statement. The study area used for the assessment **must** be clearly indicated.

c. Development in the rural area **must** deliver at least 30 dph and development in the urban area deliver a minimum density of 40 dph.

d. For all planning applications that include new residential units the below measurements **should** be provided:

- number of dwelling units per hectare
- number of habitable rooms per hectare
- number of bedrooms per hectare
- number of bedspaces per hectare

e. Plot ratios (the ratio between the site area and the total building floor area) and plot coverage (the proportion of the site area occupied by buildings) **should** be stated for mixed-use and commercial development. Plot ratios of over 2 are expected in town centre locations; between 1-2 within the urban area; and between 0.5-1 in rural locations and villages.



This density achieves higher number of units. It includes medium rise perimeter blocks with taller buildings at key corners and it may include some town houses.

High density

This density is more suburban in character, with a mix of detached, semi-detached and low rise blocks of flats generally of 3-4 storeys.

Medium density

This density is suburban in character, comprising largely semi-detached and detached houses of 2-3 storeys

Low density

Fig 98 Density gradient

5.12 Gravesham Riverside - Gravesend

5.12.6 This map illustrates the emerging vision for the Riverside Regeneration Sites of Gravesend Town Centre.

5.12.7 The Riverside Regeneration Sites are defined as part of the currently adopted Local Plan (2014), Policies CS03 - CS06.

5.12.8 Gravesend contains a number of Riverside Regeneration Sites which are under construction / built or at planning stage. These sites have been clearly identified in the map.

5.12.9 Development within these Regeneration sites must respect the character and rich history of this area, and all new housing should promote higher densities, whilst also achieving good design.

5.12.10 Development within the Riverside Regeneration Sites, but without consented design proposals, must respond to the area specific design principles below.

Gravesham Riverside - Gravesend

a. Development across these Riverside Regeneration Sites **must** introduce an active frontage along the riverside and allow for a continuous public realm, walking and cycling route along the waterfront.

b. Development **must** take into consideration key river views and be accessible to/from Northfleet High Street and local centres. Higher density development and taller buildings **should** respond to local context, with key sites adjacent to the riverfront suitable for such development.

c. Every development **must** aim to enhance north-south pedestrian connectivity between the town centre and the waterfront.

d. Development **must** positively engage with the chalk cliffs by introducing a continuous route and open space at the bottom of the cliffs.

e. Development **must** positively contribute to the grey-to-green transformation of the main key routes by placing a strong emphasis on walking and cycling, tree planting and SuDS (Sustainable Drainage Systems) .

Fig 99 Gravesham Riverside - Gravesend


Borough boundary
Railway
Chalk cliff
Green belt
Site of Special Scientific Interest (SSSI)
Ramsar site
Riverside Regeneration Sites (Local Plan 2014)
Local centre
Regeneration sites (Gravesham Borough Council)
Regeneration site extent (planning / on site / built)
Waterfront route
Cliff lower walk
Grey to green corridors
Parks and open spaces
Recommended Walking Route
Recommended Cycling Route
Improved pedestrian gateway
Height increase
Opportunity for a tall building
High density area for residential/ employment/mixed use (darker tone = highest density)
Active frontage along riverside
Opportunity for higher density
Pier
Gravesend Promenade
Milton Road
Fleetway Open Space
dmill Hill
Milton Road
The Sandpipers Open Space
St Aidan's Park

5.12 Gravesham Riverside - Northfleet

5.12.11 This map illustrates the emerging vision for the Riverside Regeneration Sites that sit along the Northfleet river front.

5.12.12 These Riverside Regeneration Site are defined as part of the currently adopted Local Plan (2014), Policies CS03 - CS06.

5.12.13 Northfleet contains a number of Riverside Regeneration sites which are under construction / built or at planning stage. These sites have been clearly identified in the map.

5.12.14 Development within the Riverside Regeneration Sites, but without consented design proposals, must respond to the area specific design principles below.

Gravesham Riverside - Northfleet

a. Development across the Riverside Regeneration Sites **must** introduce an active frontage along the riverside and allow for a continuous public realm, walking and cycling route along the waterfront.

b. Development **must** carefully consider key river views and access from Northfleet High Street and local centres and push taller buildings and higher density closer to the waterfront.

c. Every development **must** aim to enhance pedestrian connectivity between Northfleet local centres and the waterfront. This includes enhanced vertical access down the chalk cliffs.

d. Development **must** positively engaged with the chalk cliffs by introducing a continuous route and open space at the bottom of the cliffs.

e. Development **must** positively contribute to the grey-to-green transformation of the main key routes by placing a strong emphasis on walking and cycling, tree planting and SuDS (Sustainable Drainage Systems) .

f. Any development within the Northfleet Harbour locality **must** contribute to the improvement of the harbour.

Fig 100 Gravesham Riverside - Northfleet


Borough boundary
Railway
Chalk cliff
Green belt
Site of Special Scientific Interest (SSSI)
Ramsar site
Opportunity Area (Local Plan 2014)
Local centre
Regeneration sites (Ebbsflett Development Corporation)
Regeneration site extent (planning / on site / built)
Waterfront route
Cliff lower walk
Grey to green corridors
Parks and open spaces
Recommended Walking Route
Recommended Cycling Route
Improved pedestrian gateway
Height increase
Opportunity for a tall building
High density area (darker tone = highest density)
Active frontage along riverside
River Thames
High Street
The Hill
London Road
Overcliffe
Rosherville Park
Dover Road
Pellham Road
Blue Lake
Northfleet Urban Country Park
Springhead Road
Vale Road
Perry Street
Dashwood Open Space
Cygnet Leisure Centre
Woodlands Park

5.13 Building lines

5.13.1 A building line is defined by the external wall of the main building in relation to the street. Building lines play an important role for the character and coherence of Gravesham's streets.

5.13.2 Continuous building lines with regular and planned variations help deliver a well defined street scene. Where buildings do not follow a continuous alignment, the street frontage may appear fragmented.

5.13.3 The building line is usually set back from the pavement in order to define the zone between the public realm and private property.

5.13.4 In some instances, such as within town centres or local centres, or along mews streets, buildings may be located immediately to the back of footpath, pavement or public realm.

Design principle 5.13

Building lines

a. The majority of the primary frontage of a new building **must** follow the existing building line on the street. It is acceptable for architectural features such as porches, bays, balconies or limited and short protrusions to protrude beyond the building line.
b. Garages, side extensions and outbuildings **must** be set back from the building line.

c. Building lines **should** be parallel to the centre line of a street and/or buildings opposite.

d. Where existing development does not have a continuous building alignment, applicants **should** set out a building line, based on the adjoining properties, function of the street or best practice guidance.

e. Where continuation of an existing building line creates a street which is too narrow for access, servicing and functioning of the street and adjoining development, new development **should** be set back by an appropriate distance.

Fig 101 Example of new building stitching into the existing building line along a high street (Camden Hotel by Morris + Company)

Fig 102 Residential development that is respectful of existing building line and height (Vaudeville Court by Levitt Bernstein)

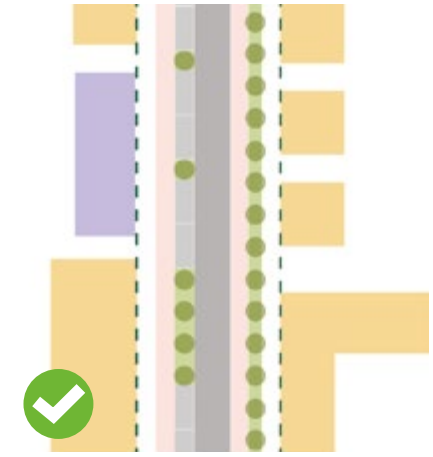


Fig 103 New buildings must follow the existing building line and their primary frontage must be oriented towards the street.

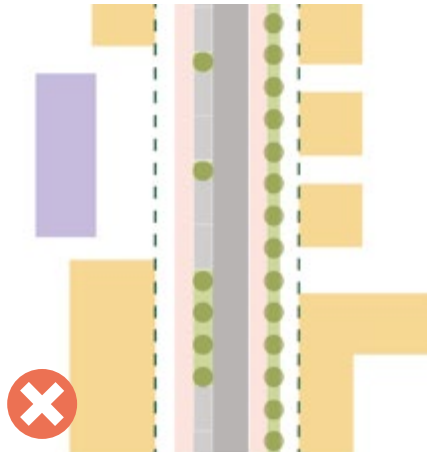


Fig 104 Buildings must not be set back from the existing building line.

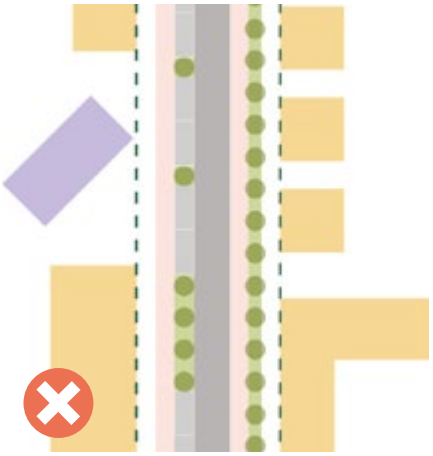


Fig 105 New buildings must not be oriented away from the existing building line.

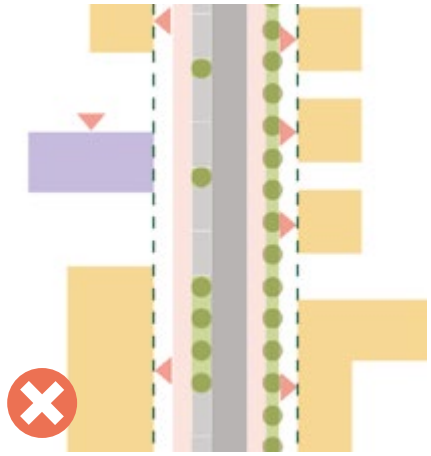


Fig 106 New buildings must avoid introducing blank façades along the street and should have their main entrance facing the street.

Fig 107 Infill development reinterpreting existing architectural features with modern materials and in a contemporary style (Home for Home RVH by McGonigle McGrath

Fig 108 Small set backs along the building line are opportunities to introduce trees and soft landscaping (Wilderness Mews by Morris + Company)

5.14 Thresholds and frontages

5.14.1 Thresholds are boundaries between public, semi-private/communal and private spaces within the streetscape, often defined by a change in material and/or landscape features. They have a very important role in helping to define defensible space, and the transition between public and private spaces in Gravesham's towns and villages.

5.14.2 The frontage of a building is the part of the building facing the public realm, often, but not exclusively, referring to the ground floor.

5.14.3 The design of thresholds and boundary treatments contribute to the character of the street or space. Poor quality thresholds and boundary treatments erode street character and quality and can create environments that feel unsafe.

Design principle 5.14
Thresholds and frontages

a. Development **must** provide threshold spaces that are integrated with the proposed architecture and landscape and respect local character.

b. Developments **must** introduce frontages with entrances and window openings at ground and upper levels facing the public realm to facilitate passive surveillance.

c. Blank gables and long stretches of inactive frontage facing streets, footpaths and public spaces **must** be avoided and will not be supported.

d. Active frontages **must** be introduced along the high street, town or local centres, key routes and open spaces to animate the street, create visual interest and provide active and passive surveillance of the street space.

e. Bin store enclosures **must** not dominate the streetscape.

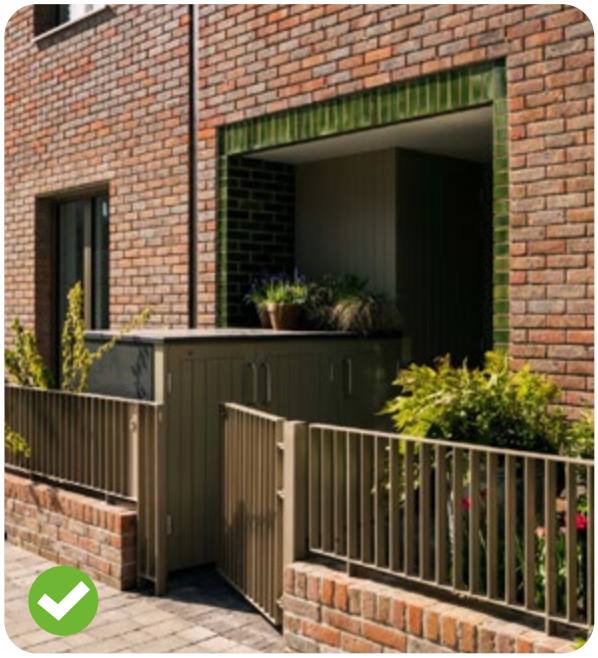


Fig 109 Front gardens can include a dedicated space for bikes and bins while still allowing for clear views of the street from the dwelling (Dujardin Mews by Karakusevic Carson Architects)

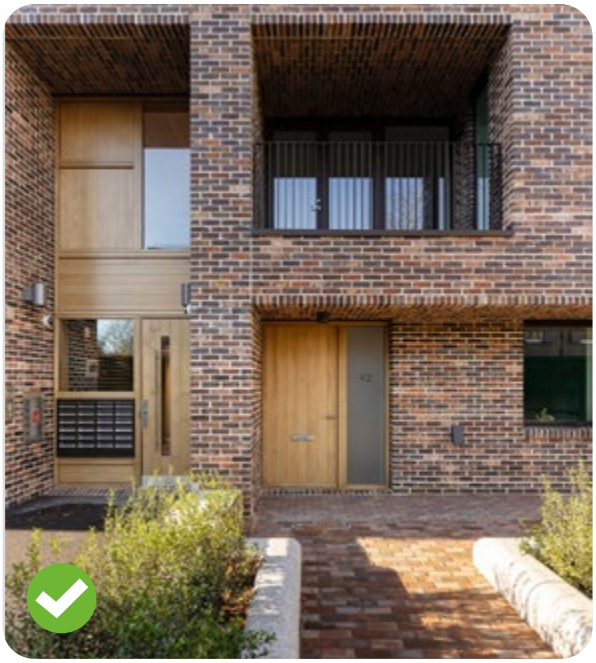


Fig 110 Entrance to ground floor dwelling and communal entrance to upper floor apartments (Branch Place by Karakusevic Carson Architects)

f. Bin stores in flatted buildings **must** be within easy access for both refuse collection and residents, and **must** avoid prominent locations in the elevations.

g. Communal refuse and cycle storage **must** be kept to a minimum on street frontages and public realm areas to ensure that overlooking of the street is maintained.

h. Primary building signage to houses and flatted buildings **must** be clearly visible and well lit.

i. Entrances to buildings **must** be designed to make all people feel safe and reduce the incidence of crime in accordance with Secured by Design principles. Entrances to buildings **should** be sheltered, well lit and open to view.

j. Ground floor homes **should** have entrances that front the street.

k. Developments **should** avoid having bedrooms at ground floor level facing the public realm as this reduces privacy and passive surveillance. The Council encourages the introduction of maisonettes on the ground and first floor of apartment buildings.

l. Front gardens **should** be a minimum of 1.5m deep and provide screening by low walls, railings or planting to protect the privacy of the residents while still allowing "eyes on street" and passive surveillance.

m. The design of front gardens **should** encourage residents to actively manage these spaces.

n. Long lengths of unrelieved hard boundary treatments **should not** be used when visible. Wooden shiplap or panel fencing will be discouraged when visible from the public realm.

o. Boundary treatments **should** be safe and not obscure visibility for vehicles emerging from properties.

Fig 111 Active frontage with front doors to dwellings and planting

Fig 112 Landscape along the threshold can help soften the transition between dwelling and public realm while enriching the character of the street (Derwenthorpe by Studio Partington)

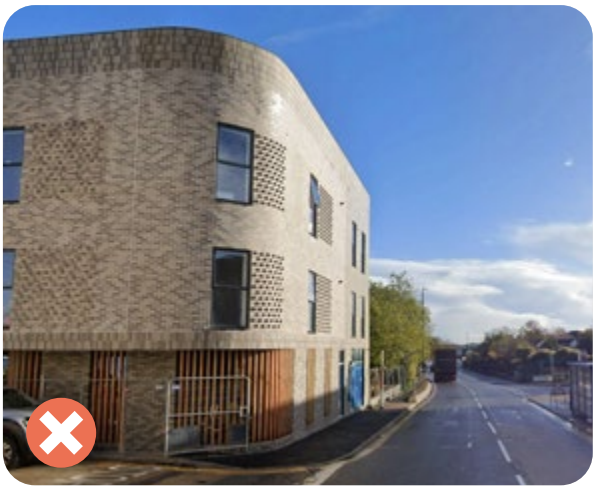


Fig 113 A non-active frontage too close to the pavement and lacking a buffer from the public realm (Lawn Road, Ebbsfleet Development Corporation site, Northfleet application reference EDC/19/0145)

5.15 Roofscape

5.15.1 The roofscape is a scene or view of roofs. Roofscapes vary throughout Gravesham depending on the period they were built in and the architectural style adopted. Gravesham's roofscapes include gable and hipped roofs in the suburbs and villages, roof forms hidden behind parapets in historic centres or flat roofs in inter/ post-war estates.

5.15.2 Therefore roofscapes play a fundamental role in defining the distinctive character of an area.

5.15.3 Variations in the roofscape can help to mark prominent corners or routes and break down an excessive monolithic building.

Fig 114 Development sympathetic to the surrounding existing roofscape (Constable Road by BPTW)

Design principle 5.15

Roofscape

a. New development **must** respect the character of the local area and **must** respond to prevailing roof forms in a way that is appropriate to the context.

b. Where there is a higher level of coherency in the character of an area, major variations to the roof form, pitch, colour and materiality **must** be avoided.

c. Roofscape design **must** consider sustainability and orientation.

d. Materials used in roofs **must** be robust and appropriate for Gravesham's estuary environment.

e. Inconsistent roof pitches **should** be avoided.

f. Roofs **should** be proportionate to the scale of the building.

g. Roofscape design **should** respond to the existing topography and to views from above where applicable.

h. In larger developments a variety of roof forms **should** be adopted to aid legibility of character areas and street hierarchy.

i. Rooftop plants **should** be appropriately screened and should be considered as integral parts of the roof design.

j. False roofs or screens without a function **should** be avoided.

5.16 Elevations and key corners

5.16.1 An elevation is the façade or face of a building. The design of elevations and key corners play a fundamental role in defining the character of a place while also aiding legibility through Gravesham's towns and villages.

5.16.2 There are no off-the-shelf solutions to contextual design, and the architecture of a building must be conceived through an understanding of the local context and its characteristics

Fig 115 Emphasis is given to detailing and materiality of ground floor, main entrances and staircase core (Ludlow Lodge by Bell Philips Architects)

Design principle 5.16

Elevations and key corners

a. Elevation design **must** respond to the scale and proportion of the surrounding character area.

b. Blank gable ends with no windows fronting the public realm **must** be avoided.

c. Applicants **must** give particular consideration to corner buildings to ensure that they positively contribute to street legibility making the most of their unique position.

d. Applicants **must** give particular consideration to recessing/projection of windows. Flush windows **must** be avoided.

e. Elevation design **should** reinterpret key aspects of the existing built form in a style appropriate to the context without resulting in pastiche replicas of surrounding buildings.

f. Elevation design **should** articulate the base, middle and top of a building, providing a balance of proportions between each part of the building.

g. Greater design emphasis **should** be given to the detailing and materiality of the building base and entrances.

h. Large elevations **should** be broken down into separate bays to provide a building that relate to the surrounding context and respond to the human scale.

i. The design of windows **should** respond to the use of the internal space, the desired levels of privacy and the façade orientation. It is important to minimise heat loss to the north (smaller windows) while providing sufficient solar heat gain from the south (larger windows).

j. External shading **should** be provided where extensive glazing is proposed on sun-exposed façades.

5.17 Materials

5.17.1 A prevailing characteristic of most successful buildings is a simple, restrained palette of materials, detailing and architectural features integral to the design.

5.17.2 When too many materials are used, building façades risk appearing untidy or overloaded. On the other hand, the use of one singular material throughout have the risk of making the development look bland and monotonous.

Design principle 5.17

Materials

a. Development **must** be sympathetic or complementary to the palette of existing materials, colours, patterns and textures.

b. Developments **must** have a coordinated site wide strategy for primary materials and colours.

c. Developments adjacent to the river **must** use materials that are robust and appropriate for Gravesham's estuary environment.

d. A predominant single colour to roofs and walls across the masterplan **should** be avoided to provide a "gentle variety" in keeping with the area.

e. Materials for secondary elements such as free standing bin, bikes and plant **should** be coordinated with the primary materials.

f. Materials **should** be used for their durability, ease of maintenance and sustainability credentials (e.g. embodied carbon and recyclability).

g. Materials **should** support biodiversity (e.g. bee bricks or bat and bird boxes).

Fig 116 Materials complementing existing palette (Corner House by 31/44 Architects)

Fig 117 A robust material palette used across different dwelling typologies

Gravesham's material palette

5.17.3 Red and yellow brick can be found throughout Gravesham's historic towns and villages usually associated with distinctive detailing around windows and door frames.

5.17.4 Materials used in the inter/post-war suburbs and more modern suburbs are varied with a mixture of red, yellow and grey bricks.

5.17.5 The brick is usually associated with a variety of rendering technique, including white weather boarding, red clay tiles and pebble dashing, which were especially popular on 1960s/1970s developments. These materials can often be found in more modern buildings as well.

5.17.6 Material variation is a direct expression of the character of a place and new developments must select materials that are sympathetic or complementary to the existing ones.

Fig 118 Typical materials that can be found in Gravesham's historic town and villages

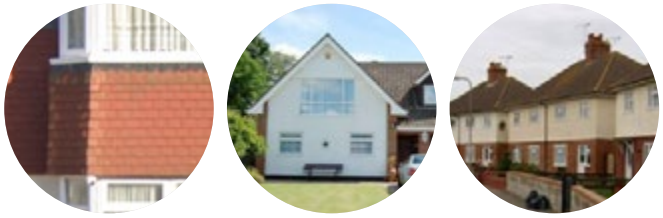


Fig 119 Typical materials that can be found in inter-post war and modern suburbs

Fig 120 Materials and details appropriate to the context should be used in new developments.

Fig 121 Using a different material around main entrances can help with marking their importance (Goldsmith Street by Mikhail Riches)

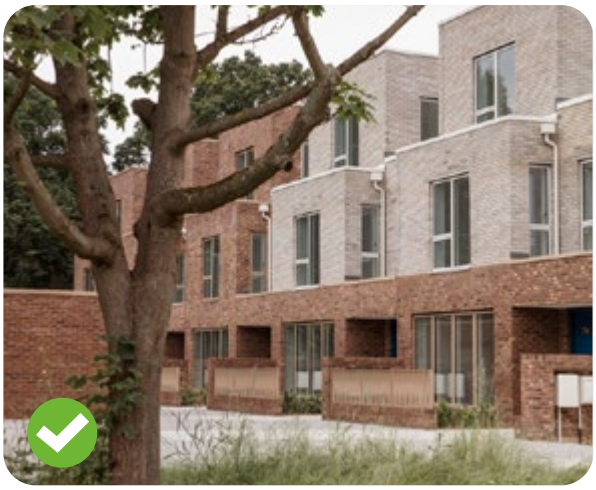


Fig 122 A darker brick is used to reinforce the importance of the ground floor and dwelling entrances (Marston Way by Stitch)

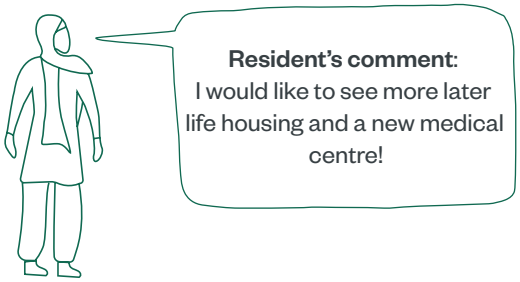
5.18 Space standards for dwellings

5.18.1 Space standards refers to the Nationally Described Space Standards, which set out requirements for the gross internal floor area of new dwellings at a defined level of occupancy as well as floor areas and dimensions for key parts of the home.

5.18.2 The Council encourages homes to exceed Nationally Described Space Standards (NDDS) in order to improve the quality of the dwellings and deliver homes that are flexible enough to adapt over time to the changing needs of its occupants.

5.18.3 Nationally Described Space Standard (NDDS) should be considered has an absolute minimum, not a target.

5.18.4 Avoiding load bearing walls within dwellings will provide that level of flexibility over time to allow layouts to be reconfigured as lifestyles evolve.



Design principle 5.18

Space standards for dwellings

a. The internal floor area of the home **must** meet the Nationally Described Space Standards (NDSS), as set out in the adopted SPD on residential layout guidelines.

b. All new dwellings **should** be Building Regulations Approved Document M4(2) compliant.

c. 10% of all new dwellings **should** be Building Regulations Approved Document M4(3) compliant (wheelchair homes).

d. All one-bedroom homes **should** have at least two habitable rooms. Sliding doors or walls may be used to separate the bedroom from the main living space.

e. Proposals for older people's housing **should** consider HAPPI (Housing our Ageing Population: Panel for Innovation) design principles.

f. Design proposals **should** consider providing additional secure storage at ground or basement level for individual dwellings in flatted buildings, and external storage in dwellings with gardens.

Fig 123 60 independent living homes following HAPPI principles (The Courtyards by Levitt Bernstein)

Fig 124 Cohousing scheme with homes designed following HAPPI principles (New Ground Cohousing by Pollard Thomas Edwards)

Fig 125 Example of older people's apartment following HAPPI principles (Carlton Dene Extra Care by Levitt Bersntein)

1. Dual aspect dwellings for improved light, fresh air and outlook
2. Glazed window adjacent to front door to allow natural light into entrance area
3. Additional study for 1bed+ dwellings with sliding door opening into living / dining space.
4. Level access shower room
5. Stacking utility cupboards / shared risers
6. Space outside front doors enlarged and designed in line with HAPPI principles to *'promote circulation areas as shared spaces that offer connections to the wider context, encouraging interaction...Including the imaginative use of shared balcony access to front doors and thresholds...'*
7. Kitchen windows overlooking walkway to encourage interaction and natural surveillance.

5.19 Aspect, orientation, daylight and sunlight

Homes & buildings

5.19.1 Aspect refers to the outlook from a building. Building orientation is the practice of positioning a building with respect to the sun to maximise solar gain at the appropriate time of the year.

5.19.2 Daylight and sunlight is the levels of natural light which reach a space.

5.19.3 Residents well-being is supported by rooms in their dwelling receiving adequate levels of daylight throughout the year.

5.19.4 Development should ensure a good level of daylight, sunlight and outlook, throughout the day and the year and minimise the impact on surrounding properties and spaces.

5.19.5 Appropriate shading control will ensure dwellings receive adequate levels of daylight and sunlight whilst avoiding the increasing risk of overheating.

Fig 126 Deck access home are encouraged to maximise dual aspect dwellings. (Sutherland Road by Levitt Bernstein)

Design principle 5.19

Aspect, orientation, daylight and sunlight

a. New developments **must** ensure that both existing and new homes receive an adequate level of natural daylight and sunlight.

b. Where single aspect homes cannot be avoided, these **must** pass the Building Research Establishment (BRE) guidance for daylight and sunlight.

c. Single aspect north facing new homes **must** only be permitted in unique exceptional circumstances (such as when facing the River Thames)

d. The principles of the Building Research Establishment (BRE) document "Site layout planning for daylight and sunlight: a guide to good practice" **should** be applied to new development.

e. New homes **should** be dual aspect unless there are exceptional circumstances that make this impracticable or undesirable.

f. Single aspect three bedroom or larger homes **should** be minimised.

g. Flatted buildings **should** maximise the number of corner, double and triple aspect flats.

h. Double loaded flat buildings **should** be oriented east-west, as shown in Fig. 129.

i. Orientation of new homes **should** follow Fig. 129-130.

j. Deck access homes are acceptable and encouraged to maximise dual aspect dwellings. South facing decks **should** be avoided.

k. Bedroom windows **should** not face immediately onto the deck.

l. New homes **should** be designed to allow direct sunlight to reach as many rooms

as possible. As a minimum, at least one habitable room **should** receive direct sunlight, preferably the living, dining or kitchen.

m. Floor to ceiling heights **should** be generous and a minimum of 2.5m **should** be achieved.

Fig 127 Courtyards are best enjoyed when they received good levels of sunlight throughout the day (Honeypot Lane by Levitt Bernstein)

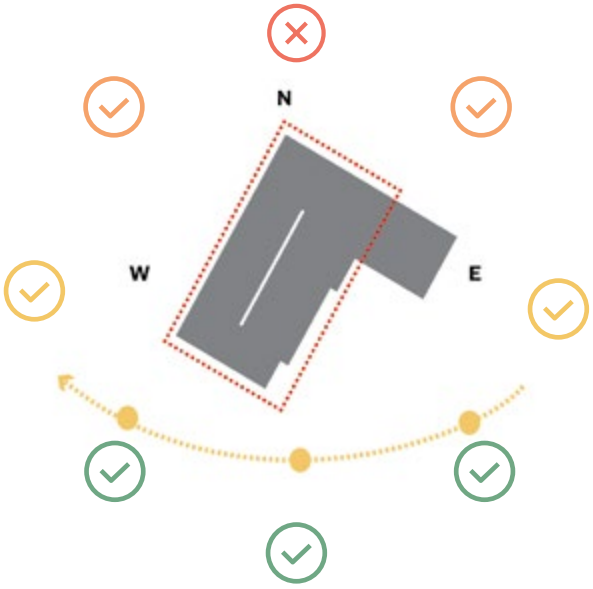


Fig 128 Acceptable orientation of new homes

Dual aspect definition

5.19.6 A dual aspect dwelling has opening windows either on opposite sides of the dwelling (A) or on two adjacent sides (B).

5.19.7 For the latter example, in order to be defined as dual aspect, windows must be at least halfway down the depth of the dwelling (B, C, D, E).

5.19.8 When facing a neighbouring wall, a dwelling can be considered dual aspect only if the separation distance between the dwelling and the neighbouring wall is the same or greater than the distance from the outer corner of the wall to the inner most edge of the window (D). Where the two aspects of a dwelling are not at right angles, the internal angle between these aspects must not be greater than 135 degrees in order for the dwelling to be considered dual aspect (E). This angle is the midpoint between 90 degrees (a dual aspect dwelling with right angled sides) and 180 degrees (a single aspect dwelling).

5.19.9 The introduction of a bay-window or stepped façade does not make a dwelling dual aspect.

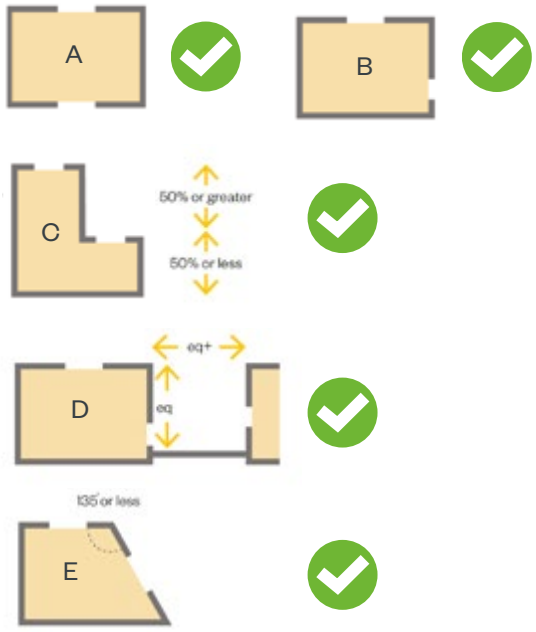


Fig 129 Dual aspect definition

5.20 Private and communal amenity

5.20.1 Residential amenity space relates to the quality of the external residential environment. Private amenity space is for use by the home it is directly accessible from. Communal amenity space is shared between a group or cluster of homes.

5.20.2 High quality, private and communal amenity space is of vital importance for people's physical and mental well-being.

5.20.3 Private and communal amenity serves a number of important functions including allowing people to experience nature as part of their home life, clothes drying, growing food and pursuing leisure activities.

Design principle 5.20

Private and communal amenity

Communal amenity space

a. All apartment buildings **must** provide access to a communal outside space either at ground or podium level. Alternative provision such as where there is good access to public open space, or in the form of roof gardens, may be considered on its merits.

b. Communal shared amenity spaces **must** incorporate areas of planting and trees. Drought-tolerant planting is encouraged.

c. Communal shared amenity spaces **must** incorporate opportunities for play, seating, relaxation, exercise and communal activities.

Fig 130 Communal garden within a courtyard building (Branch Place by Karakusevic Carson Architects)

d. Communal amenity space **should** be well overlooked by residents and accessible from the cores to all occupants regardless of tenure.

e. Daylight/sunlight in communal amenity spaces **should** be maximised particularly in the winter. Spaces designed for frequent use (seating, play) **should** receive sunlight throughout the day.

f. Applicants **should** consider providing a direct route from the street to avoid having to take large maintenance equipment through the cores.

Fig 131 Communal courtyard has an important role for play, socialising and biodiversity (Redbridge Quay by Shedkm)

Private amenity space

g. Private amenity space **must** be provided for all houses and bungalows to the rear and/or side of homes in line with Fig.136.

h. Private amenity space **must** be provided for all new flats and maisonettes subject to taking into consideration outlook, orientation, micro-climatic conditions (including noise, air quality and wind).

i. Calculation of private garden areas **must** exclude the area of parking/garage.

j. Private amenity for flats and maisonettes **should** be a minimum of 5sqm for homes with 1-2 bedspaces. An extra 1sqm **should** be provided for every additional occupant. Private amenity must have a minimum depth and width of 1.5m.

k. External access **should** be provided to the rear garden of a house or bungalow. This standard will be deemed to be satisfied where access is available through a garage without entering the house.

l. Direct access **should** be provided from the rear garden of a house or bungalow to a public highway or to a non-adopted road.

m. Front gardens of a minimum of 1.5m in depth or a landscape buffer of a minimum of 1m in depth **should** be provided for all houses or ground floor flats and maisonettes.

n. Boundary treatments and soft landscape **should** be used to create a clear distinction between public and private spaces.

o. Boundary treatments to front garden private amenity space **should** be a maximum of 1.2m height.

p. Boundary treatments to rear gardens **should** be a minimum of 1.5m in height.

q. Boundary treatments to rear gardens **should** not be solid for the portion of boundary treatment that is above 1.8m height.

r. In instances where rear garden boundaries are located directly adjacent to public streets or spaces, these **should** be designed to be robust and provide a greater degree of security.

s. New developments **should** meet Council's minimum distances.

House size	Minimum garden area (smq)	Minimum depth from rear wall of house (m)
1-2 bedrooms	37.2	7.6
3 bedrooms	60	10
4 or more bedrooms	100	10

Fig 135 Minimum outdoor amenity space size for houses/bungalows

Fig 132 Private balconies facing communal courtyard (Woodside Square by Pollard Thomas Edwards)

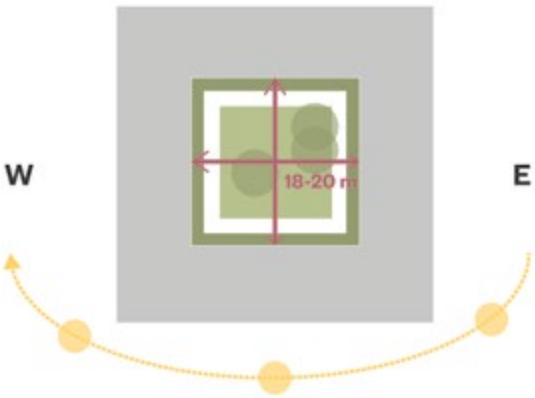


Fig 133 Communal courtyards should maximise daylight/ sunlight with minimum widths of 18-20m.

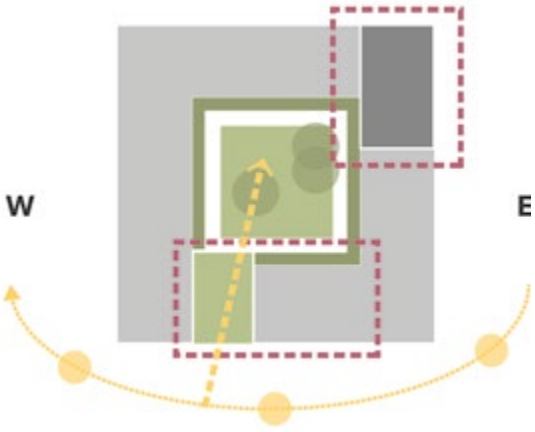


Fig 134 Courtyard blocks should have gaps and/or lower buildings to the south to allow for sunlight to penetrate the courtyard. Taller buildings within courtyard blocks should be located to the north/north-east of the courtyard to avoid overshadowing. It is also important to consider the impact of this building on surrounding streets.

5.21 Balconies

5.21.1 The Council is committed for all new apartments in Gravesham to have access to a private amenity space. Balconies, which might provide amenity space for homes at upper levels, are therefore an important feature within the elevation of a building.

Resident's comment:
Balconies on flats are very important and should be made as big as possible. Lots more people will be living in flats in the future so they should have access to private open space. Having private open space was very important to people during lockdown.

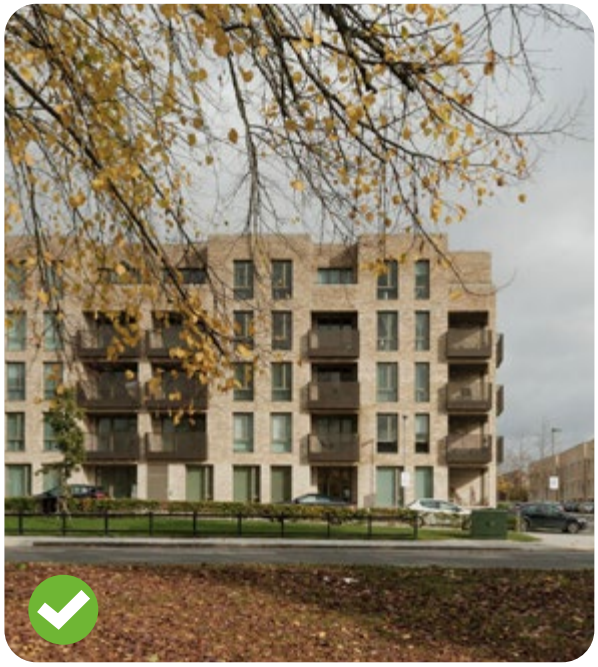


Fig 136 Semi-recessed balconies and terraces can help articulate key façades and corners (Edgware Evolution by Maccreanor Lavington)

Design principle 5.21
Balconies

a. Balconies **must** have good access to sunlight, daylight and outlook. North facing balconies **must** be avoided (unless on River frontage).

b. Balconies **should** be integral to the overall design of the elevations and **should** avoid being overly dominant. They are often more successfully visually integrated if they are partially recessed within the main façade.

c. Balconies **should** be accessed via the kitchen, dining or living space.

d. Balcony design **should** consider the need for privacy and/or shade on balconies (ideally adjustable sliding screens or retractable awnings).

e. Balcony and external amenities **should** be designed with form factor considerations in mind to support the thermal performance of the building envelope

f. The underside of balconies are very prominent in views from the street space and **should** be appropriately considered by design. They **should** be coherent with the overall design language, avoid exposed uncharacteristic materials or details, prevent bird roosting or nesting and consider the future maintenance and cleaning.

g. Applicants **should** take care when specifying balustrades as they can negatively impact the appearance of the building. Exposed balconies with transparent or excessively permeable balustrades can affect the visual coherence of a façade as residents use improvised screens to enhance their privacy.

h. Naturally ventilated winter gardens **should** be used when appropriate in limited

circumstances, for example, where dwellings will be exposed to high levels of noise and/or strong wind, particularly at the upper storeys.

i. New homes facing key open spaces **should** have balconies and/or roof terraces facing these spaces.

j. Where set backs are used, these **should** include roof terraces.

k. New balconies adjacent to existing gardens **should** be recessed or screened to ensure the privacy of existing residents is respected.

Fig 137 Design proposals should provide enough storage space within each flat to design-out the use of balconies as ad-hoc storage space

Fig 138 First floor projecting or semi-recessed balconies can provide a canopy over main dwelling entrance (New Lodge Community by PRP)

Fig 139 Semi-recessed balconies provide protection from adverse weather while integrating façade's rhythm and articulation (Pankhurst Place)

Fig 140 Set-backs in the building façades are opportunities for terraces (Rochester Riverside by BPTW)

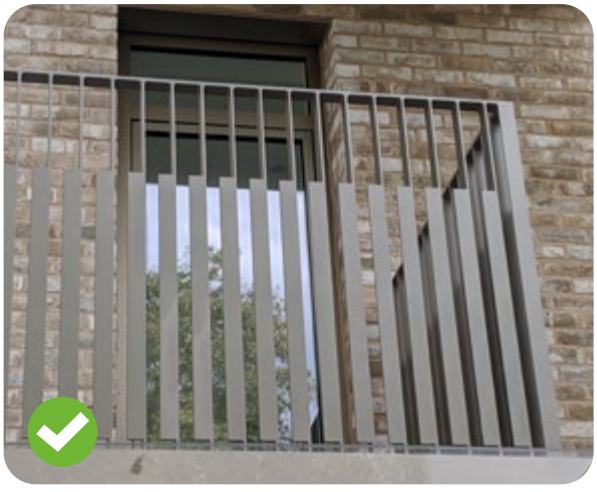


Fig 141 Balustrade design must consider how to maximise residents privacy while still allowing views out.

“I would like to see more electric vehicles charging points in the town centre. .”

Resident’s comment

Connectivity an

6

d Infrastructure

6
Connectivity and Infrastructure

Provide a framework of design principles to enhance connectivity and access to green spaces and the river improving health and well-being for all.

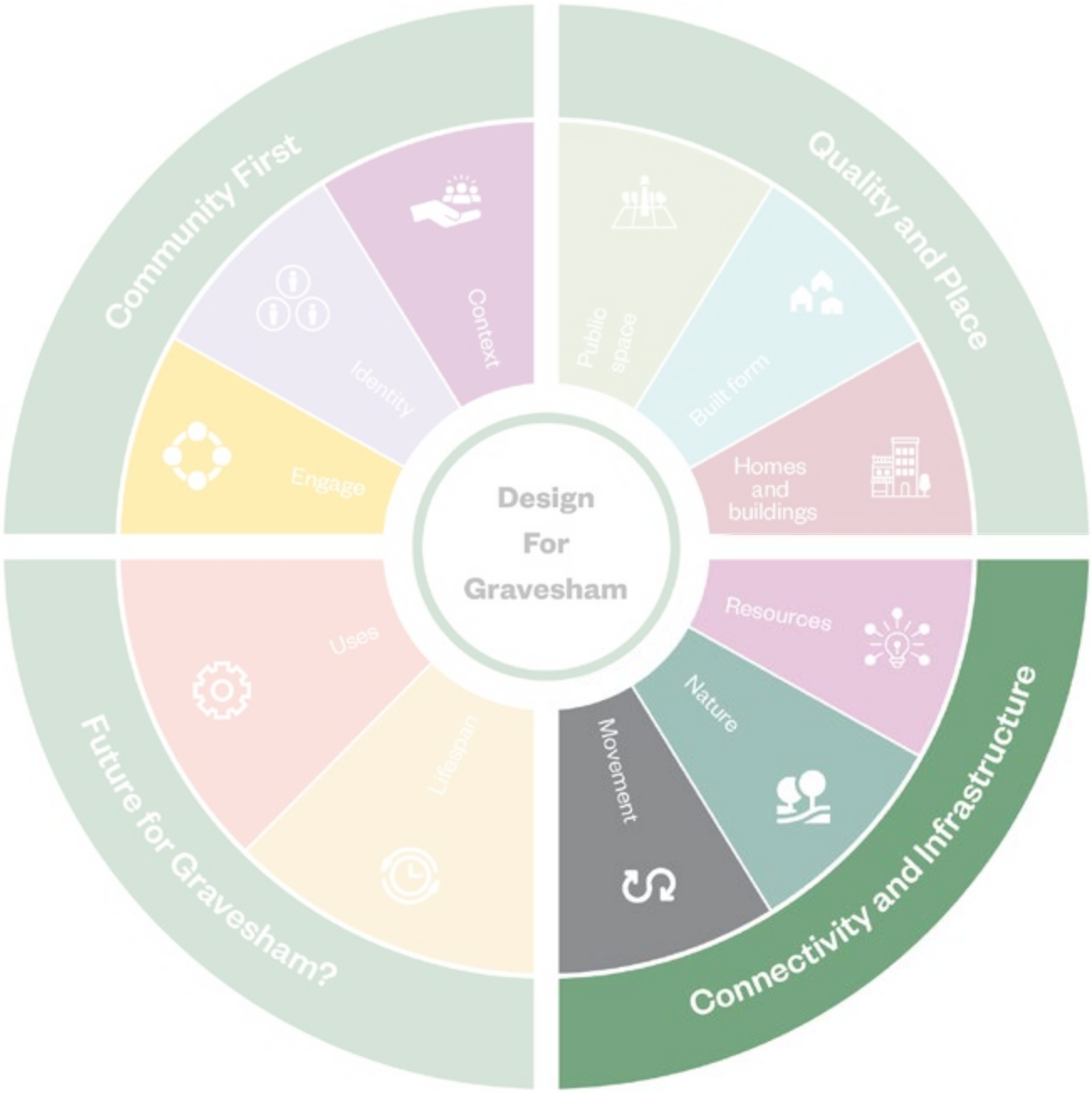


Fig 142 Design Principles: Connectivity and Infrastructure

Design principles

Movement

Supporting sustainable transport and active travel, alongside the necessity to enhance the local road network and promote a sustainable parking provision.

- Public transport and active travel
- Streets
- Vehicular parking
- Servicing
- Cycle parking

Nature

Enhancing access to the riverside and green spaces, enhancing biodiversity and ecology.

- Protecting and enhancing blue and green infrastructure
- Open spaces and green corridors
- Biodiversity
- Sustainable Drainage Systems (SuDS)
- Planting
- Trees
- Adjacency to riverside

Resources

Considering the environmental impacts of proposals and their contribution to a net zero future.

- Energy efficiency and resilience
- Retro-fit first

6
Connectivity and Infrastructure

6.1 Public transport and active travel

Movement

6.1.1 To meet the requirements of the NPPF (2023) and National Design Guide well-designed places should be accessible and easy to move around. This can be achieved through a connected network of streets, the promotion of sustainable forms of transport i.e. walking, cycling and the use of public transport, taking into account the type of development proposed and it's location as well as through well-considered parking and servicing provision.

6.1.2 Developments should be located within convenient and safe walking and cycling distance of bus stops and rail stations. Similarly, it is desirable to site developments within easy reach of transport corridors providing bus priority, direct routes to key destinations and minimising journey times.

6.1.3 Beyond walking or cycling distance, public transport provides a sustainable travel mode for longer journeys, rather than the private car, for access to schools, employment, town centre and leisure amenities.

6.1.4 The effective promotion and take-up of public transport travel requires supporting action to encourage its use with responsible levels of development related car parking.

6.1.5 Design proposals should also recognise proposals for changes to public transport provision, including changes to frequency of services and routes served, as well as on-demand and autonomous services.

Design principle 6.1
Public transport and active travel

a. Development **must** respond to the existing or planned accessibility by public transport and optimise the capacity of the site accordingly. However, any development **must** also be appropriate to its context, and comply with the design principles on height and density.

b. Applicants **should** demonstrate how the development enhances provision of and access to public transport. This could be achieved for example by providing suitable provision for public transport to be accessible from the development and/or by improving permeability of the site for pedestrians and cycles, connecting to existing walk and cycle links, routes and facilities, or by improving the existing public realm.

c. Higher density development **should** be located in areas with high public transport accessibility where bus stops are within accessible 400m walking distance and a rail station within accessible 800m walking distance.

d. Public Rights of Way (PRoW) are an important feature within the Borough's active travel network and **should** be protected or enhanced.

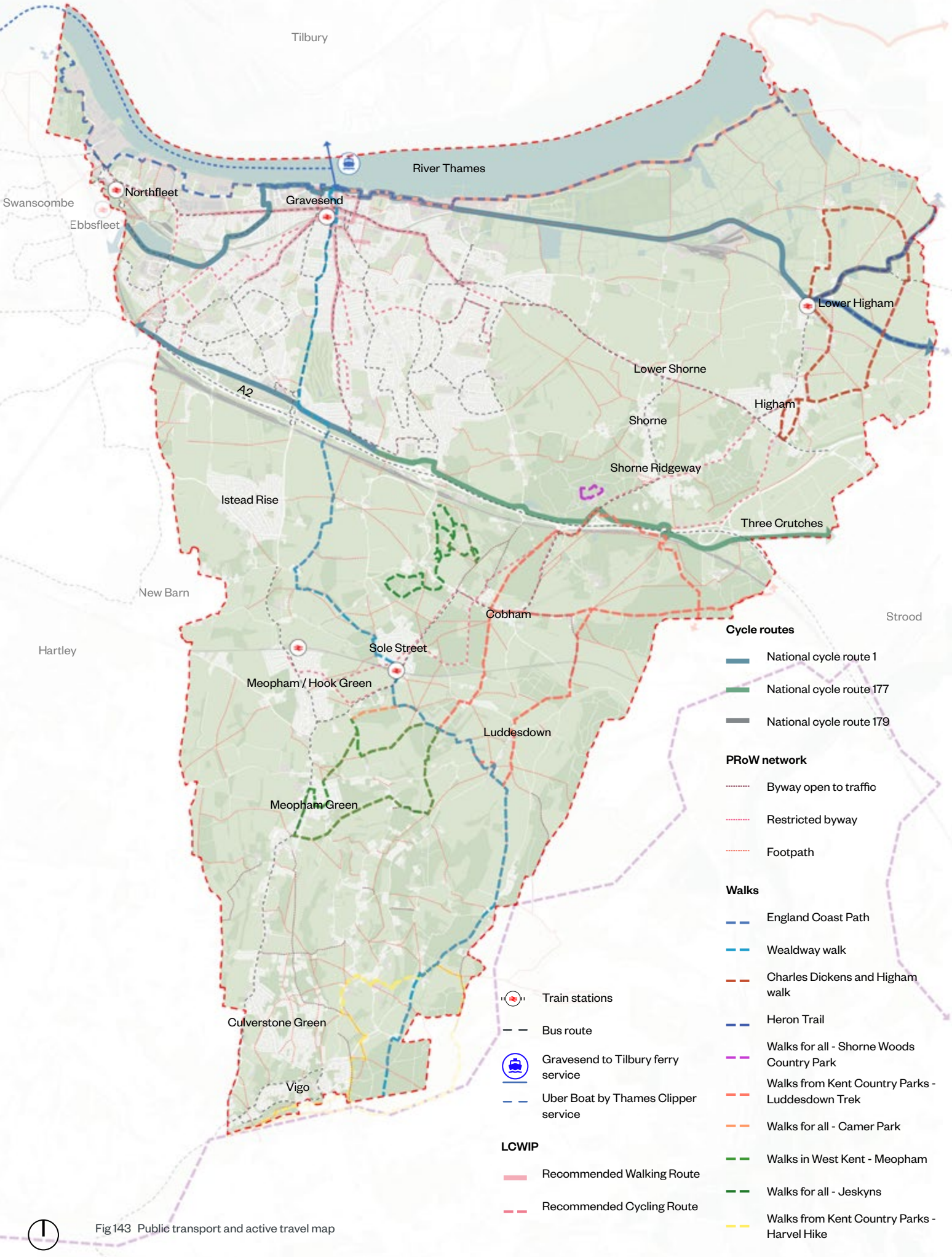


Fig 143 Public transport and active travel map

6.2 Streets

6.2.1 Streets (urban and rural) occupy a significant portion of land within Gravesham and therefore have an important role to play in defining the character of a place.

6.2.2 Streets are important as public and social spaces and have a bearing on the quality and experience of the urban environment and how welcoming a place feels.

6.2.3 It is important that new streets and wayfinding for new developments exhibit a clear pattern and hierarchy, are safe, secure, functional, encourage active and sustainable travel, support green infrastructure, and provide social interaction opportunities. The street network should be connected and enable efficient journeys on foot and by cycle.

6.2.4 The hierarchy of streets is defined by the use, scale and importance of the route. This is set out across the following pages.

6.2.5 As set out in the NPPF (2023) and National Design Guide delivering beauty and quality of place requires development not to be dominated by motor vehicles, to this end developments are required to promote sustainable transport modes taking into account the type of development proposed and it's location. New street design should seek to mitigate and manage the impact of motor vehicles on the quality of place and public realm. This could be achieved through street features and access controls as appropriate. Traffic calming features should be sensitively incorporated into street design and utilise street greening, signing, and utilise horizontal rather than vertical deflection which can cause discomfort to all road users and additional road noise.

Design principle 6.2

Streets

a. New developments **must** establish a clear hierarchy of streets and variety of street typologies.

b. The design of all streets **must** consider servicing and emergency access.

c. All primary and secondary streets **must** be designed to accommodate street trees and/or soft landscape.

d. Sustainable Drainage Systems (SuDS) **must** be prioritised when designing streets.

e. Developers **must** consult with the Highways Authority and **must** follow the Highways Authority design guidance when designing roads for adoption.

f. All street types **should** provide for clear pedestrian priority and minimise carriageway width.

g. Streets **should** be designed to prioritise pedestrians first, then cycling, then public transport and lastly vehicular movement.

h. On-street parking **should** be located to avoid key pedestrian desire lines and the related obstruction of pedestrian movement.

i. Streets **should** maximise opportunities for social interactions with pause points, seating, pocket amenity spaces and squares.

Fig 144 Wide pavement and tree planting along a secondary street (St Andrews by Townshend Landscape Architects)

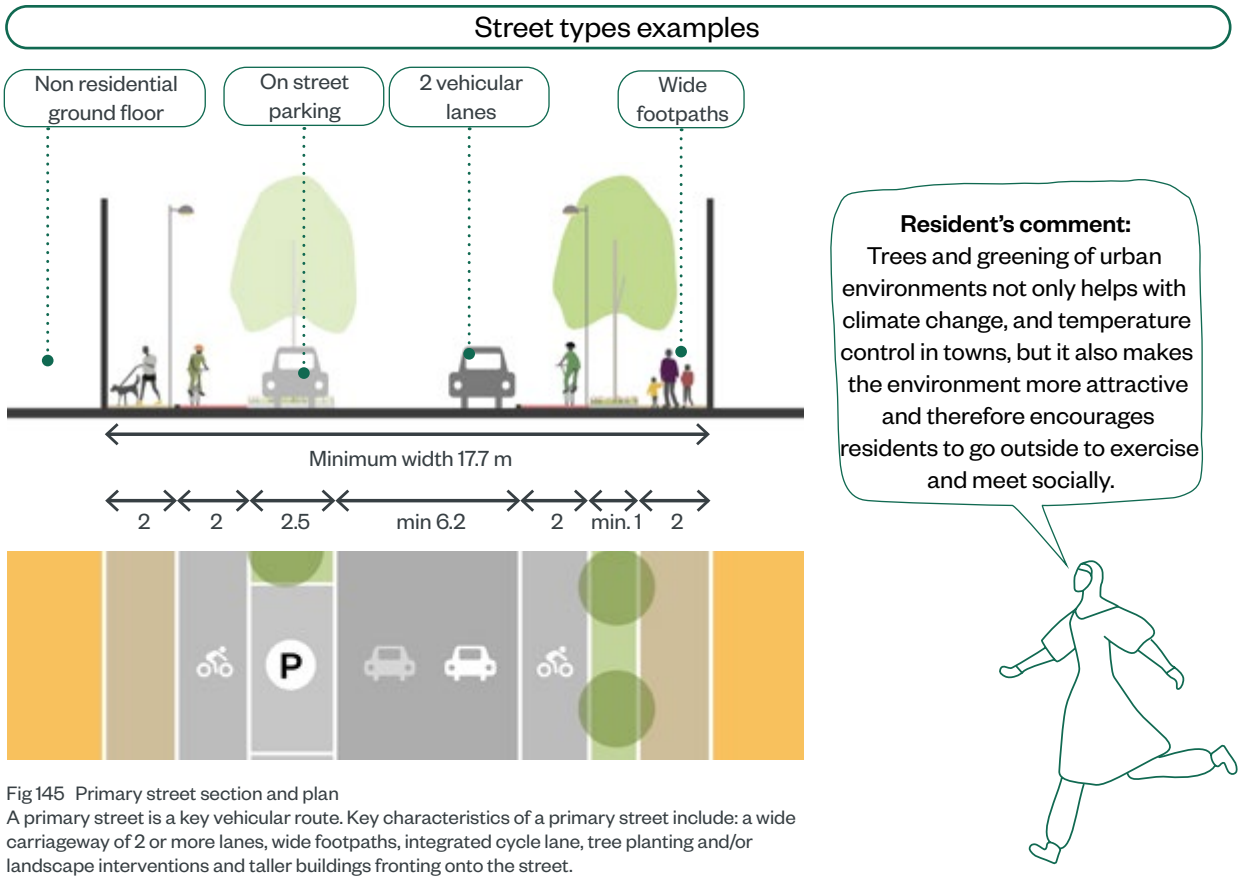


Fig 145 Primary street section and plan
A primary street is a key vehicular route. Key characteristics of a primary street include: a wide carriageway of 2 or more lanes, wide footpaths, integrated cycle lane, tree planting and/or landscape interventions and taller buildings fronting onto the street.

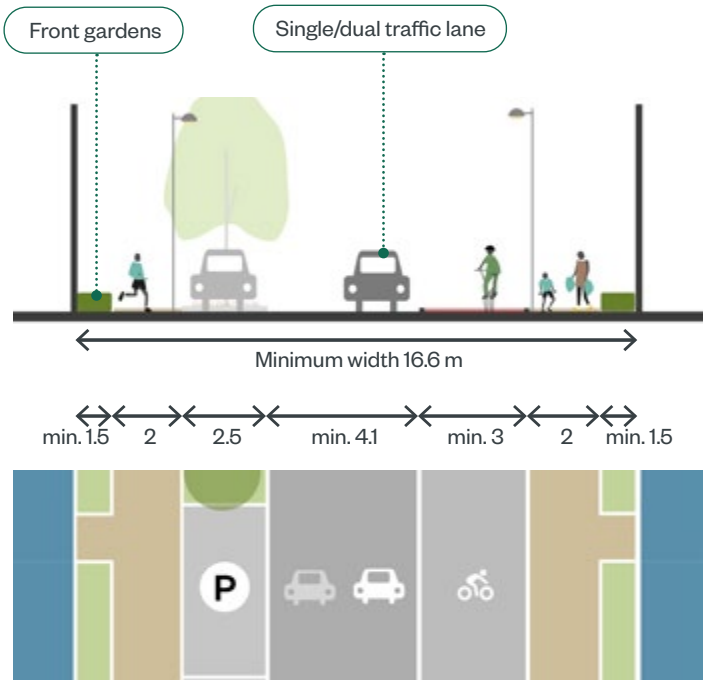


Fig 146 Secondary street section and plan
A secondary street is smaller in scale than the primary street, but is still integral to pedestrian and vehicular movement. It typically has residential uses and small shops. Key characteristics of a secondary street include: medium width street with medium rise buildings, on street parking and a clear pedestrian footpath.

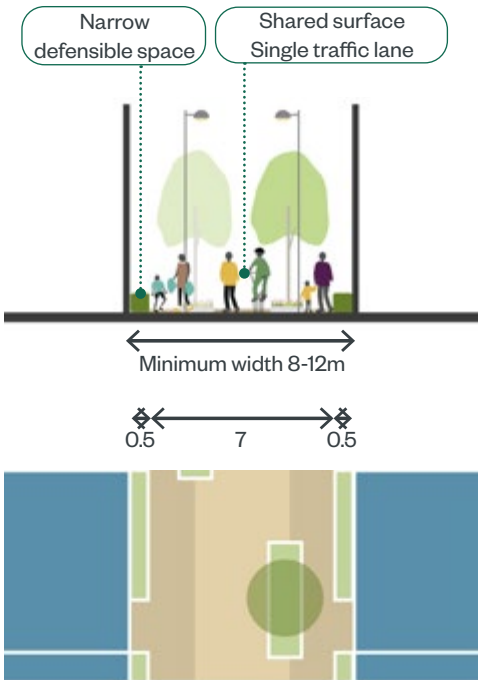


Fig 147 Tertiary street section and plan
A tertiary street is the most intimate in scale, prioritising the pedestrian over the vehicle. Key characteristics of a tertiary street include: shared surface, low rise buildings of up to three storeys and street trees.

6.3 Vehicular parking

6.3.1 The way that parking is accommodated and arranged can have a profound effect on road safety, access for emergency services, pedestrians, cyclists, environmental quality, and the character and appearance of a development. There is a balance between providing sufficient parking spaces, promoting good design and public realm, and using land efficiently.

6.3.2 Vehicular parking which is not well designed can have a detrimental impact to the quality of the public realm and streetscape. Poorly arranged on-street parking can obstruct pedestrian desire lines and opportunities for convenient pedestrian crossing.

6.3.3 Standards set out by the planning authority should be carefully considered to ensure the best possible provision of parking for each development taking into account the location, size of the development and parking needs including accessibility.

6.3.4 Pavement parking will narrow available footway widths, degrading the streetscape and impairing the accessible nature of streets and parking spaces.

6.3.5 Well-considered street parking layouts can satisfy motorists whilst also incorporating strong sight-lines for pedestrians, offering positive street animation, passive surveillance and opportunities for greening between parked cars.

6.3.6 The contributions made by trees or planting interventions should not be under-estimated. Greening can tackling the visual dominance of cars whilst contributing to biodiversity, habitat creation and sustainable drainage solutions.

6.3.7 Parking and loading 'pads' can provide for flexible and shared use of the kerbside between pedestrians and vehicles.

Design principle 6.3

Vehicular parking

a. As required by the NPPF (2023) parking provision must be adequate and appropriate for the development and it's location, whilst promoting sustainable transport modes and must include relevant accessible parking for inclusivity where required.

b. Parking provision **must** comply with the parking standards adopted by Gravesham Borough Council.

c. Proposals **must** provide sufficient electrical charging facilities in line with Building Regulations.

d. Where undercroft/podium parking is used, the majority **must** not be visible from the street and **must** avoid introducing long stretches of inactive frontage.

e. Dimensions of vehicle parking bays **should** follow standards in Fig. 150-154.

f. Parking provision **should** include practical management considerations such as numbered parking bays and adequate lighting.

g. Parking provision **should** take into account accessibility to public transport.

h. Accesses to parking **should** also be of safe design, incorporating adequate sight line visibility to avoid vehicular/pedestrian and other potential conflicts.

i. Unbroken perpendicular parking runs **should** not exceed eight spaces.

j. Unbroken kerbside parallel parking bays **should** not exceed six spaces.

k. Car club bays **should** be considered where vehicle parking is proposed in a development.

l. Parking **should** be considered for large vehicles and motorbikes.

m. Kerb upstands **should** deter parked cars overhanging/impeding footways with dropped kerbs incorporated for access

n. Planting and trees **should** be allowed adequate space to ensure longevity; paved margins **should** avoid planting being damaged.

o. Where on plot driveway parking is provided it **should** be integrated into plots and streets to avoid degrading the streetscape and maximise the opportunities for street greening and Sustainable Drainage Systems (SuDS).

p. For larger developments, unallocated parking **should** assist in minimising overall parking provision either off-street, or on-street through resident permits or controlled parking zones.

Fig 148 Example of how to integrate sustainable drainage systems (SuDS) such as permeable surfaces and rain gardens to add biodiversity in parking areas

On street parking typologies

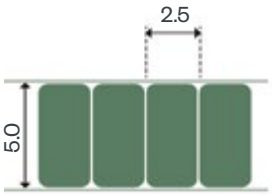


Fig 149 Perpendicular car parking bays

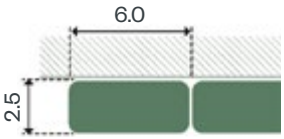


Fig 150 Parallel car parking bay

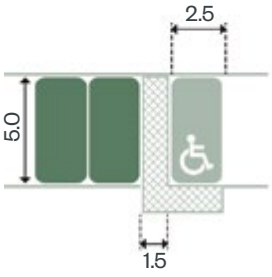


Fig 151 Single disabled parking bay

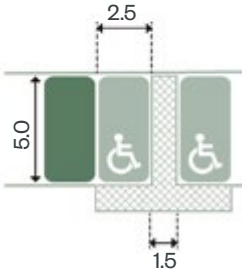


Fig 152 Adjacent disabled parking bays

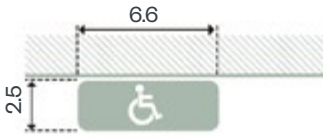


Fig 153 Parallel disabled parking bay

Vehicular parking

On street parking

Fig 154 On street parking

6.3.8 On street parking is typical along secondary streets. The use of tree planting is encouraged to break down long runs of parking bays.

Courtyard parking

Fig 155 Courtyard parking

6.3.9 Courtyard parking can provide safe and secure parking off the street, providing that the courtyard is surrounded and overlooked by other land uses. Blank, inactive façades or the backs of buildings along the parking courtyard must be avoided.

Podium parking

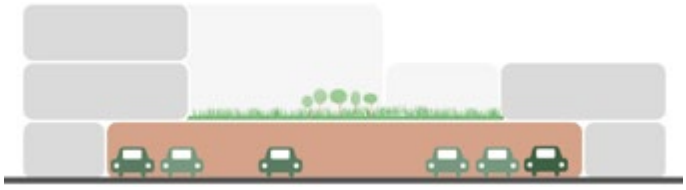


Fig 156 Podium parking

6.3.12 Podium parking is encouraged, particularly for residential development. It provides safe and secure parking off the street, with communal amenity space above. Podium parking should be wrapped by active uses and dwellings and avoid the introduction of long stretches of inactive frontage along the street.

Multi-level parking

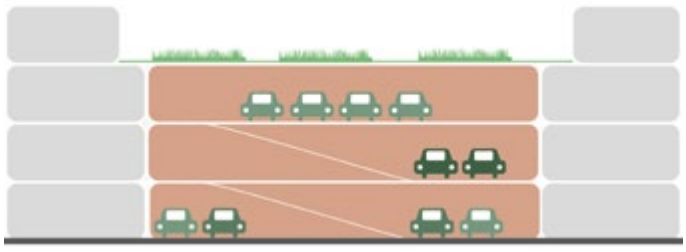


Fig 157 Multi-level parking

6.3.10 A multi-level car parking is currently being delivered in Gravesend to improve the car parking offer in the Town.

6.3.11 Multi-level car parking as with podium parking should be always flanked by active uses to avoid the introduction of inactive frontages along the street.

Fig 158 Development with a multi-level car park (The Charter in Gravesend by Leslie Jones Architects)

6.4 Servicing

6.4.1 The servicing requirements of a development have expanded significantly over the years. Servicing is an essential function in the operation of many premises.

6.4.2 Servicing movements may be numerous and involve large vehicles. As such particular care is required to design for discreet but effective deliveries and avoid detrimental impacts on the well-being of residents and the quality of the public realm.

Fig 159 Example of artwork integrated to energy centre ventilation.

Fig 160 Bin store incorporated within the design of the dwelling entrance (Pump House by Levitt Bernstein)

Design principle 6.5

Servicing

a. Refuse/recycling storage and plant rooms **must** be designed to provide easy access for maintenance.

b. Loading bays and turning circles within the public realm **must** be designed to provide for efficient deliveries but should not dominate the streetscape.

c. Refuse/recycling stores **must** accommodate all bins to meet the needs of residents and be of a size acceptable to the refuse collection service.

d. Refuse/recycling storage and plant rooms **must** be designed to avoid having a deadening impact on the building façade.

e. Refuse/recycling storage and plant rooms **should** not obstruct the passive surveillance of the street.

f. Refuse/recycling storages **should** be secure, well ventilated and easily accessible without causing nuisance through unpleasant odours or noise.

g. Applicants **should** consult the Council's Waste Services at an early stage to determine suitability of their refuse collection strategy.

h. Substations **should** be designed to reduce their impact on the public realm. Substations in a prominent location **should** utilise measures as green walls/roofs, soft landscape and art to help reduce their visual impact.

i. Site wide strategies for energy and underground utilities **should** be coordinated from an early stage with strategic place-making approaches for greening, such as trees, sustainable drainage systems and planting.

6.5 Cycle parking

6.5.1 All new developments must aid the growth of Gravesham's cycle infrastructure. Easily accessible and well integrated cycle parking can play a significant role in promoting and encouraging cycle use for sustainable journeys in the neighbourhood and wider Borough.

6.5.2 Sheltered, secure and high quality cycle storage in key public spaces and in close proximity to key movement routes will be needed to maximise the effectiveness of cycle parking facilities.

6.5.3 Public cycle parking may be provided in the public realm using racks, sensitively sited to avoid obstruction to pedestrian movement.

6.5.4 For residential and workplace developments communal cycle parking should be sheltered and secure and provided either in external freestanding structures or internally.

6.5.5 Workplace parking may include showers, lockers or cycle repair facilities.

Design principle 6.4

Cycle parking

a. Cycle parking **must** be provided in accordance with current Kent County Council's Design Guide as a minimum.

b. All cycle parking **must** be well lit and in areas where there is passive surveillance.

c. Short stay / visitor cycle parking **must** be provided by non-residential or community uses and by areas of play and recreation.

d. All cycle parking **should** be easy to access for all users and should not obstruct pedestrian movement.

e. All new developments **should** consider the provision of short- stay visitor cycle parking.

f. Cycle parking **should** be provided in excess of minimum policy requirements where vehicle parking is proposed below policy requirements.

g. Sheffield/U-profile stands **should** be provided as a minimum. Stands should spaced apart with a minimum of one metre between each other. A two-metre length **should** be allowed for a cycle parking bay, ensuring the stand is sufficiently set back from any walls to ensure it is usable.

h. Proposals **should** demonstrate how cycle parking facilities cater for larger cycles, including adapted cycles for disabled people and electric cycles.

i. Proposals **should** consider supporting new staff cycle parking with the provision of showers, storage and changing facilities within the development to encourage the use of cycles as a means of transport.

Large cycle storage (apartment buildings)

j. Location of cycle storage **must** be carefully considered and integrated to enable active frontage and avoid a deadening impact upon the façade and threshold.

k. Cycle parking to flatted buildings **must** be secure, covered and near the entrances.

l. Cycle storage **should** normally be located within the building envelope at ground floor.

m. Cycle storage to larger developments **should** be divided in several stores across the site to promote ownership and facilitate access.

n. Applicants **should** consider non-standard and inclusive cycles e.g. cycles with child trailers, cargo bikes, recumbent or wheel-chair friendly tricycles. Sheffield style cycle stands are appropriate for non-standard cycles.

Individual cycle storage (houses and terraces)

o. Cycle storage **must** allow visual surveillance from ground floor window into the street for passive surveillance.

p. Cycle storage in front gardens **must** be within maximum dimensions of 2m wide, 1m deep and 1.5m tall.

q. In houses, cycle parking **should** normally be located on plot, within the front or rear garden, garage or other outside storage.

r. Cycle storage **should** be screened by planting or low wall.

Fig 161 Bike store integrated within the design of the dwelling entrance (Dujardin Mews by Maccreanor Lavington)

Fig 162 Bike store with integrated planter allowing clear views from dwelling windows.

Fig 163 Secure and accessible bicycle storage with green roof to promote biodiversity

6.6 Protecting and enhancing blue and green infrastructure

Nature

6.6.1 Gravesham has a rich blue and green infrastructure, from landscapes and habitats of local significance (Local Wildlife Sites) to those having international importance (Thames Estuary and Marshes Ramsar).

6.6.2 The Kent Downs AONB to the south-east contains significant areas of ancient woodland which are collected within a National Nature Reserve designation.

6.6.3 The Thames Estuary and Marshes Ramsar has international significance due to the aquatic and terrestrial environments in these locations.

6.6.4 The habitats support internationally important numbers of wintering waterfowl whilst the saltmarsh and grazing marsh are of international importance for the diverse range of wetland plants and invertebrates.

6.6.5 The adjacent diagram highlights the abundance of green space to the south and east of the Borough with strategic routes which could be re-inforced as green corridors penetrating into the urban centres of Gravesend and Northfleet.

6.6.6 Whilst green spaces outside of these urban centres should be preserved and protected through appropriate development control measures, the importance of realising green-linkages within urban centres is also vitally important.

6.6.7 It is important the new developments deliver strategic greening interventions at the doorstep, improving the lives of residents whilst also making space for nature.

6.6.8 Design proposals must also be cognisant of the strategic context of new development, ensuring they reinforce wider objectives for green corridors, movement routes and do not negatively impact existing blue or green infrastructure.

Design principle 6.6

Protecting and enhancing blue and green infrastructure

a. New developments **must** be designed to conserve, enhance, connect, and improve the use and access of the Borough's existing blue and green infrastructure.

b. New open space provision **must** be designed to be inclusive and enjoyable by all community groups.

c. New developments **must** integrate approaches for the creation of green and blue infrastructure at a doorstep and strategic level, responding to the site context.

d. Trees, hedges, woodland and natural green spaces positively contribute to the sense of identity of a place and **should** be integrated into the design proposals with a presumption against removal in all instances.

Resident's comment:
It's a shame that there's not an 11km long walking path along the river. There is no way to walk from Northfleet to the town centre. For public health (physical and mental) this needs to be improved.

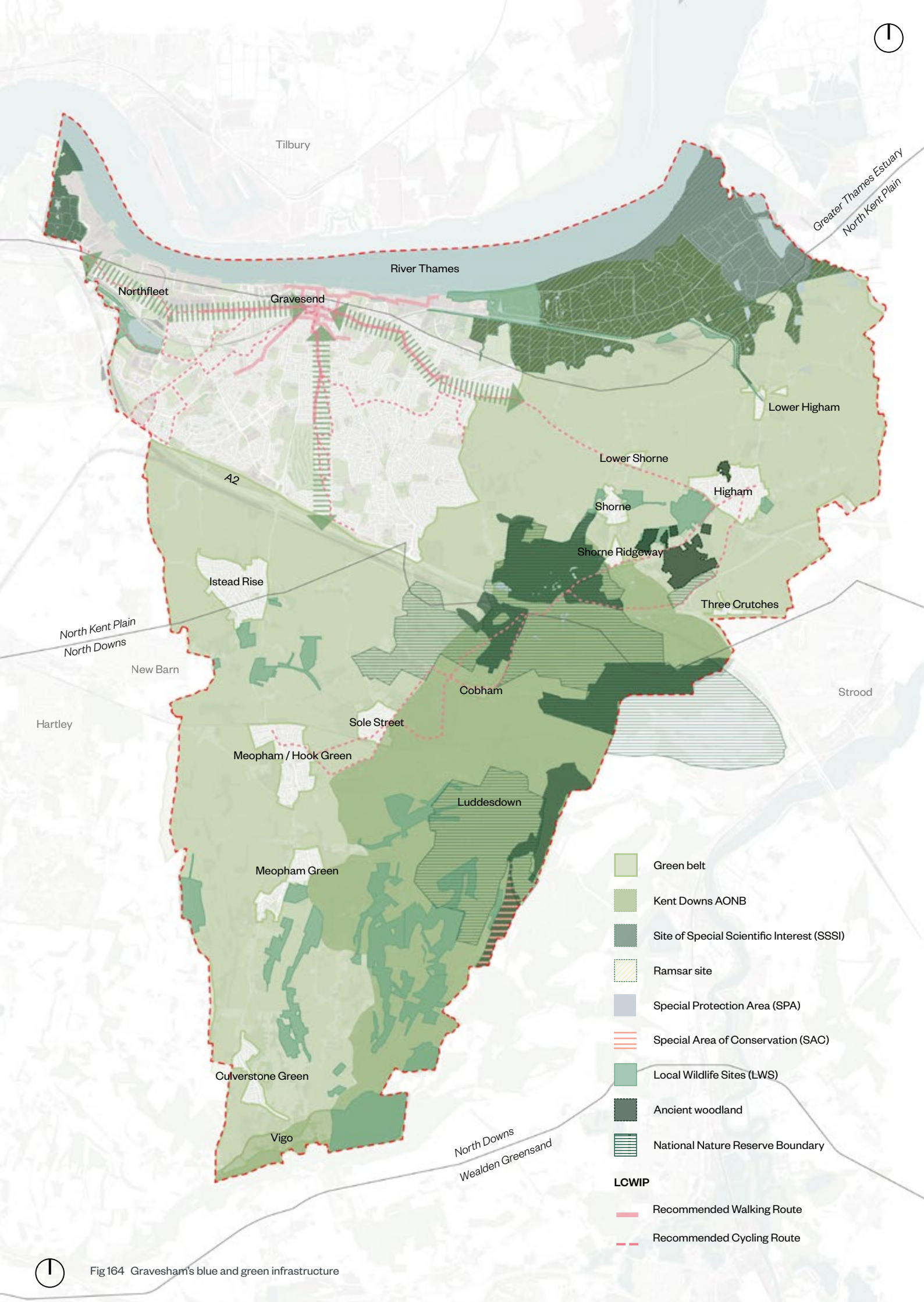


Fig 164 Gravesham's blue and green infrastructure

6.7 Open spaces and green corridors

Nature

6.7.1 Gravesham has numerous open spaces from large country parks to small neighborhood playgrounds. 51% of Gravesham's residents who completed the consultation survey consider "access to nature" as the best thing about Gravesham.

6.7.2 Public open spaces play an important role in the creation of sustainable neighbourhoods.

6.7.3 They encourage healthy, social and cultural activity whilst contributing to the attainment of biodiversity gain and provision of a green infrastructure network.

6.7.4 Open spaces should support the whole community, offering flexible use to satisfy a range of needs whether active or passive.

6.7.5 Movement to and between open spaces is vital to their success, with green corridors and pedestrian/cycle access reinforcing the wider network.

6.7.6 Improving access and use of open spaces for new and existing communities helps to tackle the Borough's health and wellbeing inequalities.

6.7.7 Management of open spaces should be devised to consider habitat creation as well as the successful longevity of the spaces.

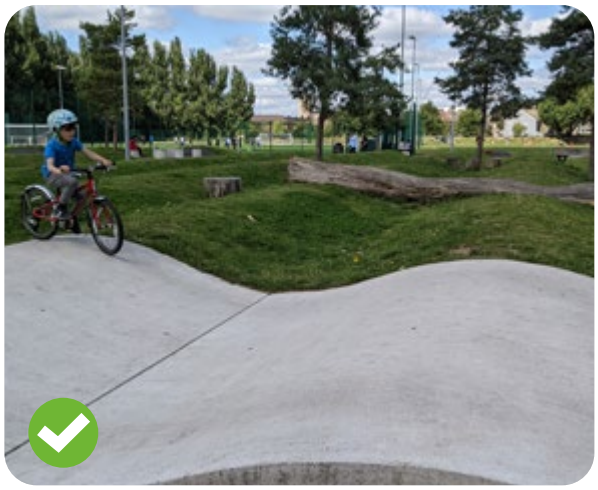


Fig 165 Landscape design should consider bold landscape-level design features, focussing on robust character as well as function

Design principle 6.7

Open spaces and green corridors

a. Open spaces **must** be positioned in strategic locations promoting links to the wider green and blue infrastructure.

b. Open spaces **must** offer opportunities for play, sports and recreation whilst also considering complementary benefits of education and community stewardship.

c. All outdoor play spaces **must** be located in areas which are well overlooked, accessible from footpaths, and take advantage of the location to offer sunshine, shelter, shade and views where possible.

d. Greening **must** be comprehensively incorporated with plant species that offer climate change resilience, biodiversity value, considered levels of maintenance and drought tolerance. A complex palette should be promoted including climbing plants, hedgerows, tree avenues, bulb planting, meadow grass and woodland.

e. Open spaces **should** be easily accessible and inclusive to residents of all ages and offer variety in amenity value.

f. Open spaces **should** be innovative, open to interpretation, flexible in use; offering opportunities for imaginative play and improving physical, mental and social abilities.

g. Surface water run-off **should** be utilised as Sustainable Drainage Systems (SuDS) features, reducing impact on underground sewers and allowing for a more natural process.

h. Applicants **should** use ecology surveys and habitat management plans to inform the proposed approach to creating or managing open spaces and green corridors.

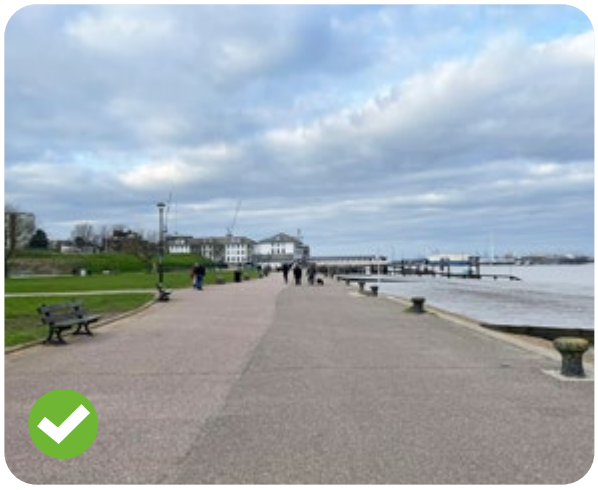


Fig 166 Gravesend's Promenade

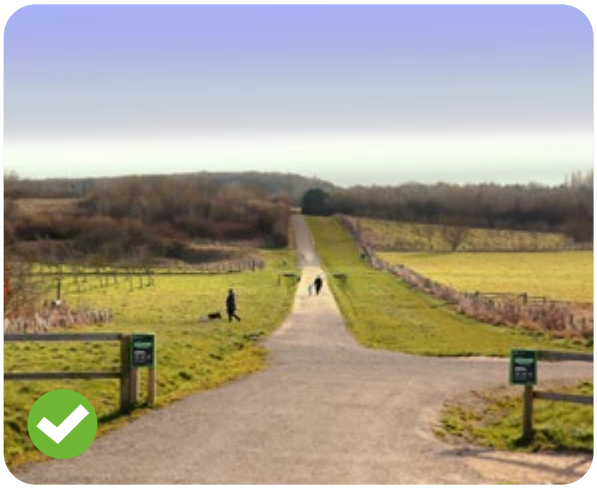


Fig 167 Jeskyns Community Woodland

- Open Space
- Town Centre boundary
  (vehicular and cycling restrictions apply, see local signage for further details)
- Riverside walk
- Recommended Walking Route
- Recommended Cycling Route
- Key view

Resident's comment:
I would like to see the rural character of the borough protected and valued more.

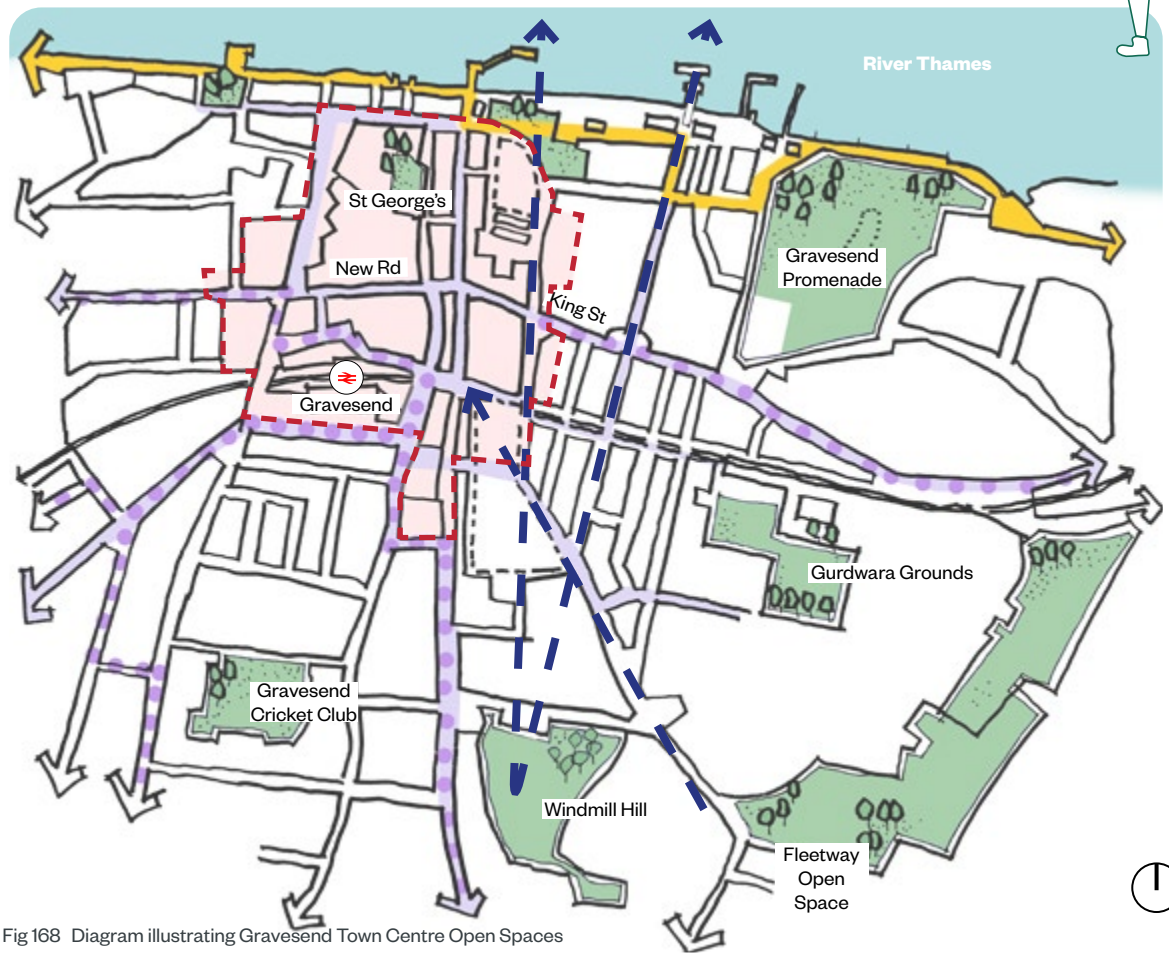


Fig 168 Diagram illustrating Gravesend Town Centre Open Spaces

6.8 Biodiversity

6.8.1 It is critical that new developments are designed to maintain, restore and enhance biodiversity in Gravesham's towns and villages.

6.8.2 Biodiversity Net Gain (BNG) is an approach to development, and/or land management, that aims to leave the natural environment in a measurably better state than it was beforehand.

Fig 169 Encourage the integration of habitat in to the built form with subtle design features (e.g. bird/bat boxes)

Fig 170 Example of habitat wall

Design principle 6.8

Biodiversity

a. Biodiversity in Gravesham **must** be protected and enhanced through the design of streets and spaces.

b. A qualified ecologist **must** undertake an initial assessment of the biodiversity value of a site before the layout is developed with a view to retaining and enhancing existing biodiversity value on site.

c. A minimum 10% Biodiversity Net Gain **must** be targeted (householder applications to be exempt). BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years.

d. New developments **should** establish ecological networks that are resilient to future climate change pressures.

e. New developments **should** promote links with the existing blue and green infrastructure through habitat creation and improvement.

f. Opportunities for biodiversity enhancement **should** be maximised Measures can consist of:

- Species-rich planting palettes with a bias towards native and wildlife friendly species
- Habitat creation features such as bird boxes, bat boxes, hedgehog houses, fence gaps for commuting wildlife
- Re-use of felled trees on site as log piles or dead hedges
- Biodiverse roofs
- Integration of sustainable drainage systems (SuDS)

g. Existing trees and valuable habitat features **should** be integrated into the site layout and landscape design with a presumption against removal.

6.9 Sustainable Drainage Systems (SuDS)

6.9.1 Due to climate change, whilst the number of rainy days in Gravesham each month will reduce marginally in summer months and stay roughly the same in winter months, the amount of rain will increase with the heaviest rainfall being more intense.

6.9.2 Reducing the amount of surface water run-off into the public below-ground drainage system is therefore paramount.

6.9.3 Sustainable Drainage Systems (SuDS) are a series of design approaches which aim to emulate natural drainage processes. Instead of channelling rainwater away as quickly as possible into man-made sewers, rainwater is collected at the surface where it lands and directed to infiltration first or released at a controlled rate.

6.9.4 This reduces the peak flows that occur during a storm event, meaning that existing sewers and water courses are better able to cope with the demand.

6.9.5 Kent County Council are the Lead Local Flood Authority under the Flood and Water Management Act. They have further guidance published on SuDS which is available via their website and should be followed.

Design principle 6.9

Sustainable Drainage Systems (SuDS)

a. Sustainable Drainage Systems (SuDS) hierarchy **must** be used and be integral to the design of the streets and spaces.

b. Opportunities for SuDS **should** be maximised and incorporated within the design of all streets and spaces, either to convey surface water run-off or to attenuate it locally.

c. Applicants **should** consider the specific characteristics of the site to determine the most appropriate SuDS measures to implement. These can include:

- Planted bio-swales or rain gardens
- Retention and detention ponds
- Permeable surfaces

d. Where SuDS measures are used, in addition to their function as a drainage feature, these **should** be designed to improve water quality and biodiversity, in consideration of contamination risk to ensure the protection of groundwater and source protection zones in particular.

e. Opportunities for blue roofs and use of grey water from buildings **should** be also considered.

f. Applicants **should** consider early the impact and interface with underground utilities and archaeology to ensure a coordinated design approach.

Fig 171 Example of a linear, planted bio-swale contributing to plant diversity

Fig 172 Tree planting, SuDS and street furniture along a secondary street (Burridge Gardens by Hawkins\Brown)

6.10 Planting

Nature

6.10.1 Good design and beauty is key to the delivery of successful development and this should be a fundamental aspect of any planning application. The Council is keen to ensure that applicant's take account of planting design proposals in line with this design code from the outset, whilst acknowledging that final approval of details may in some instances only occur as part of reserved matters or as part of the discharge of planning conditions.

6.10.2 The majority of Gravesham's residents who have completed the online consultation survey would like to see more greenery across the Borough.

6.10.3 Planting design within each new development or community should seek to reinforce landscape-led masterplan principles and character areas. The design qualities of streets, open spaces, courtyards, civic spaces and play opportunities should consider integration of meaningful planting in order to create vibrant, attractive spaces that contribute towards climate change resilience and biodiversity uplift.

Fig 173 Wildflower meadow can offer excellent diversity and impressive displays when used in appropriate locations

Design principle 6.10

Planting

a. Planting design **must** maximise species diversity, be biased towards wildlife friendly and native species and tolerant of a changing UK climate.

b. New development **must** not utilise artificial grass in external amenity spaces.

c. A mix of evergreen and deciduous plants with varying qualities **should** create year-round interest with seasonal bulbs and perennials.

d. Street planting **should** focus on robust, low-growing shrubs that will preserve sight-lines and define areas such as parking and defensible spaces.

e. Amenity lawns **should** support play and other flexible uses and **should** be sufficiently large to ensure they are adequately hard-wearing.

f. Selective mowing regimes **should** be considered to produce grass meadow areas. Diversity **should** be introduced through bulb or wildflower planting extending the wildlife value.

g. Planting **should** be set at-grade avoiding raised planters which can dry-out quickly. Soils **should** be free-draining to avoid heavy rain inundating planting beds.

h. Bedding displays and exotic planting are particularly high maintenance and **should** be avoided.

i. Vertical greening can make positive contributions to place-making. Suitable climbing plant species **should** be planted into adequately sized soil volumes. High maintenance intensive green walls **should** be avoided.

j. Planting design **should** consider aspect, micro-climate and soil conditions.

k. Planting strategies **should** consider culinary and edible species to connect local people with their landscape settings.

6.11 Trees

6.11.1 Good design and beauty is key to the delivery of successful development and this should be a fundamental aspect of any planning application. The Council is keen to ensure that applicant's take account of tree proposals in line with this design code from the outset, whilst acknowledging that final approval of details may in some instances only occur as part of reserved matters or as part of the discharge of planning conditions.

6.11.2 Gravesham's Council seek to enhance the positive contribution trees bring to the Borough with appropriate retention of existing trees and new tree planting.

6.11.3 Trees have a strong impact on well-being, help combat climate change, reduce urban heat island effects, and soften the impact of buildings and structures.

6.11.4 Trees and soft landscape also contribute positively to the character of an area by providing both physical and visual amenity.

6.11.5 Trees provide a connection to nature and indicate the passage of the seasons through their growth and change throughout the year.

6.11.6 Trees can pose high value, low maintenance components in achieving healthy communities with climate change resilience.

6.11.7 Existing trees can be afforded protection through Tree Preservation Orders (TPOs), Conservation Area designation and felling licences. Before pruning or felling existing trees, confirmation should be sought with the Council that the tree(s) are not afforded enhanced protection.

Design principle 6.11

Trees

a. Where proposed works may impact existing trees, the applicant **must** follow British Standard 5837:2012 '*Trees in Relation to Design, Demolition & Construction: Recommendations*' with oversight by a qualified arboriculturalist.

b. Trees and planting **must** be prevalent along new streets with adequate space allowance above and below ground to protect underground infrastructure from tree root ingress.

c. New tree species **must** consider canopy size, form, character, drought tolerance, wildlife creation and climate resilience.

d. If existing trees **must** be felled, mitigation planting within the development **must** be like-for-like in canopy cover or girth size.

e. New trees **must** have adequate support and an irrigation pipe for effective watering.

f. Trees in public realm spaces **must** be no smaller than 20cm girth, budgets should prioritise watering in the first three years.

g. Trees set within planting **must** be prioritised with trees in intensive pits limited to civic spaces where paved surfaces must reflect footfall.

h. Where applicants propose pruning, works **should** comply with BS 3998:2012.

i. Proposed tree planting **should** offer variety and interest (colour, texture, scale, form and seasonality) with a 2m clear-stem to preserve sight-lines

j. Assumption towards the retention of trees **should** prevail due to the benefits posed.

k. Trees **should** be planted as rootballed stock in winter months.

l. Applicants **should** discuss their proposals with the tree officer to understand how trees can best work for their site.

6.12 Adjacency to riverside

6.12.1 Gravesham's history is interwoven with the history of the Thames. The river is an asset which should be celebrated and drawn-into the daily lives of as many people as possible.

6.12.2 New development should address the riverside, despite the challenges of aspect and micro-climate that need to be addressed.

6.12.3 Connectivity along the riverside offers natural recreational opportunities and potential for commuting routes by foot and by bicycle.

6.12.4 The river corridor and close proximity to the Thames Estuary and Marshes Ramsar designation mean planting and habitat creation opportunities within new development should be devised with wide connections for green and blue infrastructure in mind.

6.12.5 Sustainable, landscape-led approaches to engineering should be adopted to ensure that natural processes can be integrated into river wall design and drainage systems (SuDS).

6.12.6 The Estuary Edges guidance, Port of London Authority guidance for a safer riverside, Metropolitan Police Drowning Prevention Strategy and the Environment Agency guidance should be referred to.

Design principle 6.12
Adjacency to riverside

a. New development **must** not restrict access to the riverside, but enhance public access for all where possible.

b. New developments adjacent to the riverside **must** deliver enhancement to the waterside environment.

c. Applicants **must** engage with the Environment Agency and design proposals **must** be in line with the Environment Agency's current strategic regulations (such as Thames Estuary 2100).

d. Any new development within flood risk areas **must** demonstrate compliance with local and national policy on flood risk and be safe over its lifetime. This **must** also consider and make provision for the delivery of new flood defences and enhancement and ongoing maintenance of existing ones.

e. New development **must** demonstrate compliance with marine policy, as set out in the South East Marine Plan, and not conflict with the safe commercial or recreational use of the river.

f. New development **should** not introduce blank elements or non-permeable boundaries higher than 1.2m along the riverside.

g. Applicants **should** demonstrate how their design proposals integrate flood risk mitigation measures.

h. New development **should** introduce active uses along the riverside and where appropriate allow use spillage into the public spaces.

i. Opportunities for soft landscaping and tree planting **should** be maximised with large canopied, robust and resilient species appropriate for the setting.

j. New development **should** provide a natural buffer zone free from development along the riverside to make space for biodiversity, whilst also offering a mosaic of habitat creation at ground level and roof level.

k. Developments **should** respond to riverside history and heritage of the Borough.

Fig 175 Avoid excessively engineered approaches to riverside access

Fig 176 An active riverside with mixed-use developments set back from the waterfront to allow for a generous public realm (Waterfront Promenade at Aker Brygge by Link Arkitektur)

Fig 177 Housing set back from the riverside allowing for a generous public realm for pedestrians and cyclists (Sandkaj by Mikkelsen Arkitekter)

Fig 178 Housing along a riverside promoting walking and cycling (Redbridge Quay by Shedkm)

Fig 179 Creation of waterfront open spaces along the riverside (Rochester Riverside by BPTW)

6.13 Energy efficiency and resilience

Resources

6.13.1 The Council has declared climate emergency and published a Climate Change Strategy in 2022. The Council has set an ambition for the Borough to become carbon neutral by 2030.

6.13.2 In order to achieve the target, developers must create buildings and places that are sustainable, efficient and future proof wherever possible, ensuring energy efficiency and climate adaption measures are embedded in the design process.

Fig 180 Contemporary townhouses designed to passivhaus principles (South Garden by Maccreanor Lavington)

Fig 181 Sustainable materials in a countryside setting (Woodlands by Clague Architects)

Design principle 6.13

Energy efficiency and resilience

a. New developments **must** create buildings and spaces that reduce their environmental burden and the long term financial burden for occupiers.

b. Applicants **must** demonstrate they have maximised energy efficiency of their proposals by using aspect, orientation and design elements to help reduce heating and lighting needs.

c. Applicants **must** consider the effects of climate change specifying robust landscape, materials and infrastructure that can help the building future climate adaptation, thereby making development climate resilient.

d. Developments **must** adopt a "fabric first" approach to reduce their energy demand before integrating renewable alternatives.

e. Proposals **should** take into account Gravesham's Climate Change Strategy.

f. Applicants **should** create flexible and adaptable buildings using construction methods that could enable future alterations.

g. Applicants **should** demonstrate they have maximised water efficiency of their proposals through water efficient infrastructure, harvesting of rainwater and re-use of grey water in line with current Building Regulations.

h. Proposals **should** introduce low and zero carbon decentralised energy generation infrastructure where viable. Where it is currently unviable, the introduction of infrastructure to aid future installation **should** be considered.

i. Applicants **should** demonstrate they have integrated or considered the sustainability of the construction process and off-site construction methods.

6.14 Retrofit first

6.14.1 One of the ten key priorities of the Gravesham's Climate Change Strategy is to set up a Kent and Medway net-zero buildings retrofit plan and programme for public sector, domestic and businesses.

6.14.2 Existing homes are by far the most polluting in the housing sector.

6.14.3 Of all the operational emissions that come from buildings in the UK, 69% come from energy use in the domestic stock which alone is responsible for 18% of our annual national emissions.

Design principle 6.14

Retrofit first

a. Where applicants propose whole demolition and new development, they **must** demonstrate that opportunities for retrofit have been explored and discounted as a viable alternative.

b. Retrofit schemes **should** take a holistic approach by considering the condition of the existing building(s), identifying the improvement opportunities and detailing the measures to be implemented.

c. Retrofit interventions in heritage buildings **should** be put in relations to how the heritage values are affected. Setting the objectives for preservation is essential for finding the appropriate measures.

d. Existing buildings **should** be retrofitted to increase their water efficiency in line with current Building Regulations and reduce their carbon emissions to net zero equivalent through, for example, improvements to the building fabric, switching to low carbon heating or adding photovoltaic panels.

Fig 182 The retrofit of historic buildings contributes to re-inforcing the character and history of the place (The W T Henley Building in Northfleet)

Fig 183 Retrofit of 1960s housing estate to improve energy efficiency (Hillingdon Square by Mae)

“More disabled parking and improved accessibility throughout the town centre.”

Resident’s comment

Future

7

for Gravesham?

7
Future for Gravesham?

Support holistic regeneration that responds to local needs and enhance quality of life, livelihoods and opportunities.

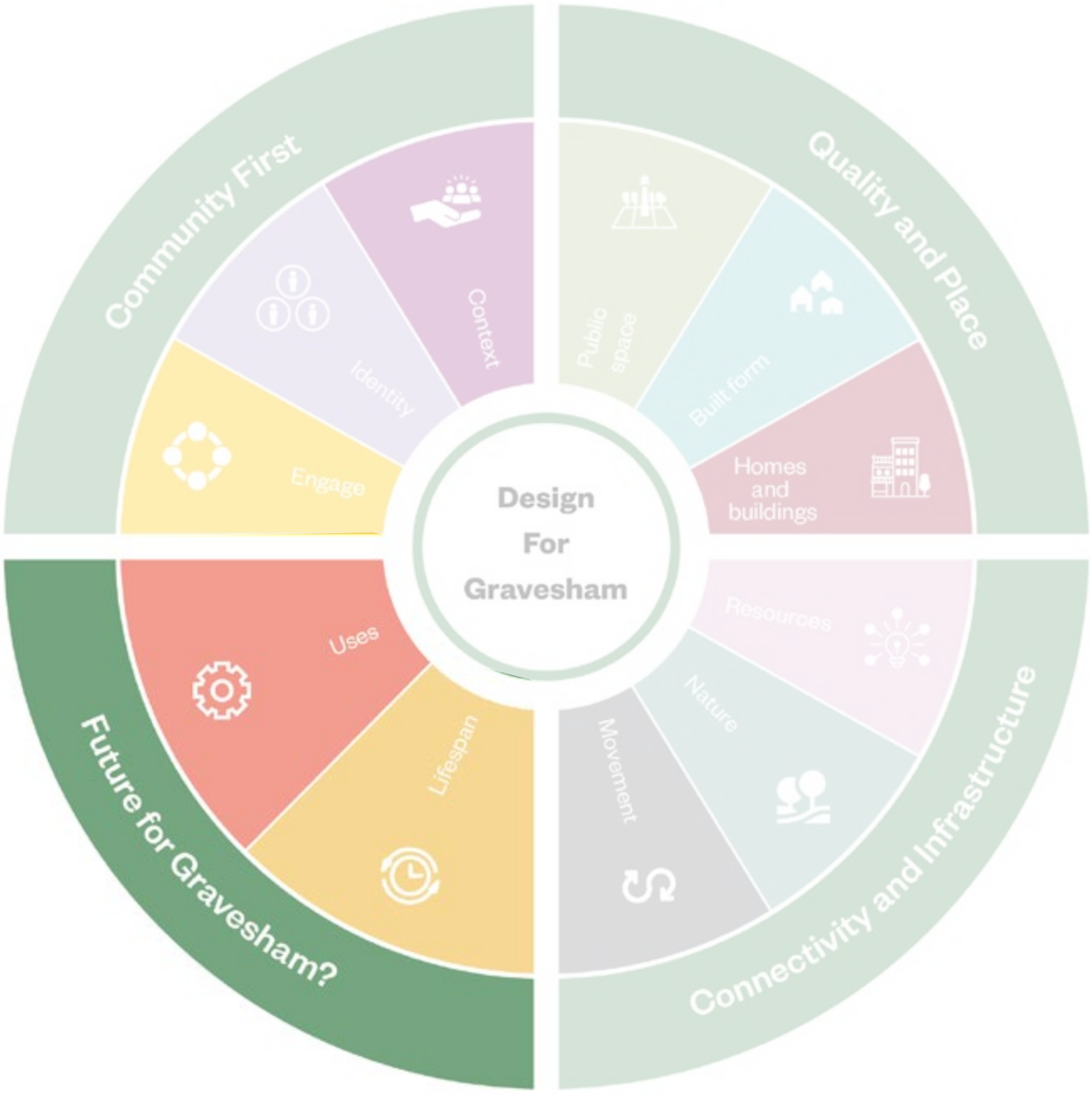


Fig 184 Design Principles: Future for Gravesham?

Design principles

Uses

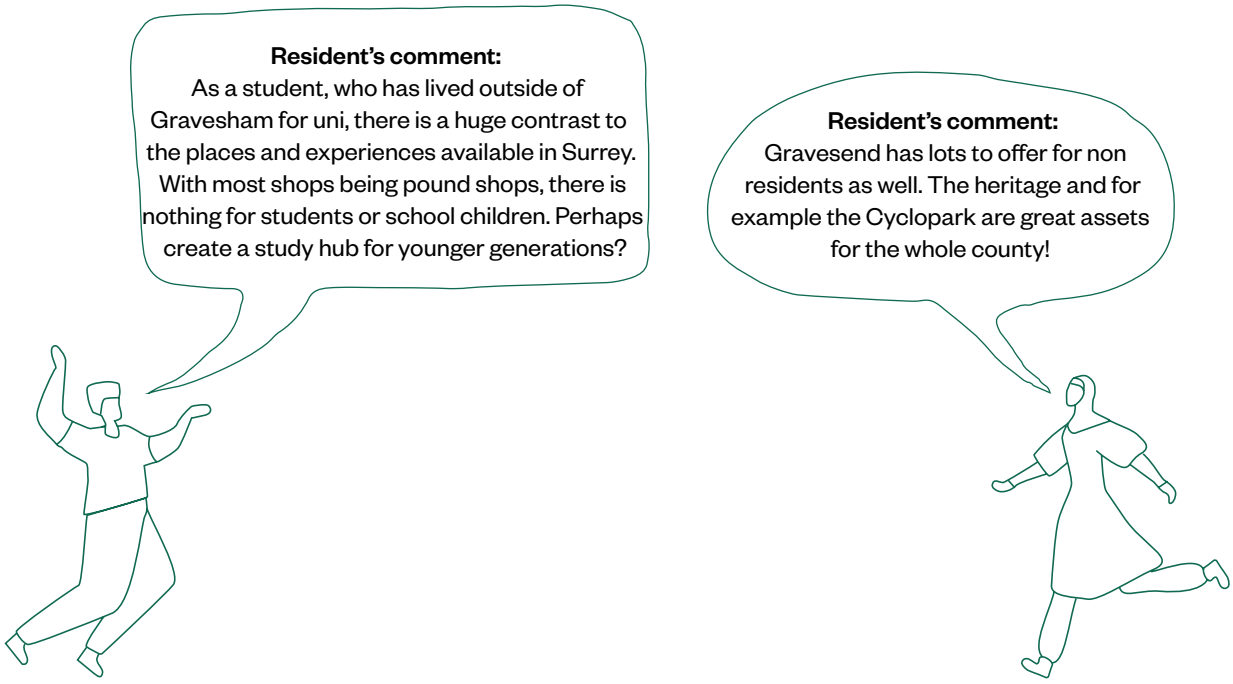
Rich-mix of opportunities

Maximising a mix of uses and benefits from sites to deliver new housing, skills and jobs to support good growth.

Lifespan

Management and maintenance

Clarity of vision and holistic plan for delivery, management plans, participation with the community



7
Future for Gravesham?

7.1 Rich-mix of opportunities

Uses

7.1.1 The Council is committed to the creation of thriving local neighbourhoods, with employment, cultural and leisure opportunities, everyday services and amenities within walking distance of each home.

7.1.2 Mixed-use communities play an important role in delivering sustainable and high quality places. A mix of uses helps to ensure that places are well-used and occupied at all times. Places with a mix of densities, uses, types, sizes and tenures are vibrant, convenient and feel safe to use.

7.1.3 Gravesham has the smallest economy in Kent, so employment land is precious to retain local jobs and cut down the need to travel. It is also necessary to provide for a variety of business uses.

7.1.4 The majority of industrial areas are concentrated in the north of the Borough and along the river.

7.1.5 The Council encourages to maximise the contribution to employment in the Borough from sites in existing or previous employment use.

7.1.6 The Council also encourages more efficient use of land for commercial uses, to enhance the quality of the environment and the introduction of new mixed-use developments linked to the surrounding residential areas.

Fig 185 Gravesend Borough Market

Design principle 7.1

Rich-mix of opportunities

a. Development **must** contribute towards the provision of balanced communities, with employment sites and wharves protected inline with the Development Plan.

b. Major regeneration sites and higher density developments **must** enable the provision of a mix of uses, where feasible.

c. Development with homogeneous use classes **should** be avoided.

d. Applicants **should** discuss with the Council the specific use mix the development is aiming to deliver as early as possible in their design process.

e. Development **should** promote mix tenure communities to create vibrant neighbourhoods. Similarity of tenure may be acceptable in certain instances for specialist facilities e.g. bespoke housing for defined groups such as disabled, homeless and the elderly.

f. Applicants **should** promote co-location of residential and other uses in order to retain employment opportunities within the Borough while introducing a more sustainable mix of uses.

g. When new development includes sport/ leisure uses, design proposals for those uses **should** follow the current Sports England guidance and/or any other relevant body.

Resident's comment:
We need more substantive jobs in the Borough to avoid Gravesham becoming a commuter town.

7.2 Management and maintenance

7.2.1 A consistent and long term approach to management and maintenance of open spaces and public realm is critical to ensure it remains high quality and enjoyable.

7.2.2 A maintenance and management strategy for the public realm and open spaces, alongside waste and parking if under the remit of a management company, should be prepared early on. This should include the identification of funding sources to pay for the upkeep and highlight suitable opportunities where community stewardship and engagement could take place.

7.2.3 Management and maintenance should ensure clean and tidy environments that appear to be well-cared for and engender pride in community. It is also critical that management processes consider the importance of habitat creation and sustainability, avoiding hazardous chemicals and products containing peat-derivatives.

7.2.4 To ensure public open spaces are maintained to the same standard across the Borough, the most appropriate approach is through the adoption by the Council. Developers are encouraged to transfer such sites, with stewardship funds, to the Council for adoption. This will ensure that all public open spaces will be available to all and maintained in perpetuity for public benefit.

Fig 186 Residents' gardening event

Design principle 7.2

Management and maintenance

a. Large developments (over 150 dwellings) **must** avoid piecemeal management in favour of the adoption of a management plan.

b. Applicants **must** engage in early talks with the Council and other relevant bodies to discuss adoption standards and determine what areas of the development will de adopted to ensure that the proposed design is able to be appropriately managed and maintained.

c. Unadopted public areas **must** be maintained to a high standard by a private site management company.

d. The proposed hard and soft materials palettes **must** be cognisant of available budgets for maintenance.

e. Maintenance **should** consider the below key issues:

- Cleanliness and attractiveness of external space
- Sustainability and energy efficiency of maintenance - considering re-usable sources of water and low-energy lighting
- Promoting the ecological value of landscape spaces, ensuring maintenance regimes avoid unnecessary use of chemicals and approaches that do not promote biodiversity
- Engaging residents with certain appropriate maintenance measures to connect with the outdoors and take pride in their community
- Ensuring close co-ordination with architectural maintenance strategies and highways-led approaches to access and refuse

"I would like to see more green spaces, more nature and trees integrated in the urban area."

Resident's comment

Appendix A

Compliance checklist

8
Appendix

Compliance checklist

Applicants will be expected to submit a completed Compliance Checklist with their application. This should be included with the Design and Access Statement when this is required.

The Compliance Checklist will be used by the planning authority to aid with the assessment of the planning application.

Applicants are encouraged to use the Compliance Checklist at an early stage and throughout the design process.

Applicants are expected to provide an explanation with each answer given.

Item	Description	Mandatory parameters only	Mandatory and partial interpretative parameters	Both mandatory and interpretative parameters	N/A
1	Do the 4 main threads (Community First, Quality and Place, Connectivity and Infrastructure and Future for Gravesham? underpin the design proposals?				
2	Are the design proposals accompanied by a vision? Has the vision being clearly set out in the Design and Access Statement?				
3	Has the applicant engaged meaningfully with the local community throughout the design process **as set out in the mandatory and interpretative parameters of Design Principle 4.1?**				
4	Do the design proposals positively respond to Gravesham's unique identities **as set out in the mandatory and interpretative parameters of Design Principle 4.2?**				
5	Do the design proposals promote a place-specific and contextural approach **as set out in the mandatory and interpretative parameters of Design Principle 4.3?**				
6	Do the design proposals follow the guidance for public space **as set out in the interpretative parameters of Design Principle 5.1?**				
7	Has the proposed play space been designed in line with **the mandatory and interpretative parameters of Design Principle 5.2?**				
8	Have the proposed surface finishes been designed using high quality, robust materials promoting accessibility for all **as set out in the mandatory and interpretative parameters of Design Principle 5.3?**				
9	Have inclusive design and accessibility been considered from the outset in line with the **mandatory and interpretative parameters of Design Principle 5.4?**				

Item	Description	Mandatory parameters only	Mandatory and partial interpretative parameters	Both mandatory and interpretative parameters	N/A
10	Has the proposed street furniture been designed in line with **the mandatory and interpretative parameters of Design Principle 5.5?**				
11	Does the proposed lighting create a safe and welcoming environment **as set out in the mandatory and interpretative parameters of Design Principle 5.6?**				
12	Has the proposed wayfinding been designed in line with **the mandatory and interpretative parameters of Design Principle 5.7?**				
13	Has the proposed community-led art been integrated in the public realm and designed in line with **the mandatory and interpretative parameters of Design Principle 5.8?**				
14	Does the proposed development pattern, grain and scale follow the **mandatory and interpretative parameters of Design Principle 5.9?**				
15	Does the proposed height reflect the existing local character **as set out in the mandatory and interpretative parameters of Design Principle 5.10?**				
16	Have the proposed tall buildings been deisgned **as set out in the mandatory and interpretative parameters of Design Principle 5.11?**				
17	Does the proposed density reflect the existing local character **as set out in the mandatory and interpretative parameters of Design Principle 5.12?**				
18	Does the proposed development respect the existing building line **as set out in the mandatory and interpretative parameters of Design Principle 5.13?**				
19	Have thresholds and frontages been integrated within the proposed architecture and landscape and designed in line with the **mandatory and interpretative parameters of Design Principle 5.14?**				
20	Does the development respect and respond to the prevailing roof form **as set out in the interpretative parameters of Design Principle 5.15?**				

Appendix

Item	Description	Mandatory parameters only	Mandatory and partial interpretative parameters	Both mandatory and interpretative parameters	N/A
21	Have the proposed elevations been designed to respond to the scale and proportions of the surrounding character areas **as set out in the mandatory and interpretative parameters of Design Principle 5.16?**				
22	Have proposed materials been chosen in line with the **mandatory and interpretative parameters of Design Principle 5.17?**				
23	Do the proposed dwellings meet the requirements set out in the **mandatory and interpretative parameters of Design Principle 5.18?**				
24	Have the proposed dwelling been design taking into account aspect, orientation, daylight and sunlight as set out in the **mandatory and interpretative parameters of Design Principle 5.19?**				
25	Has private and communal amenity been designed in line **mandatory and interpretative parameters of Design Principle 5.20?**				
26	Have proposed balconies been designed in line **mandatory and interpretative parameters of Design Principle 5.21?**				
27	Has the development been designed to respond to existing or planned public transport accessibility and to promote active travel in line with **mandatory and interpretative parameters of Design Principle 6.1?**				
28	Have streets been designed to follow **mandatory and interpretative parameters of Design Principle 6.2?**				
29	Has vehicular parking been designed to follow **mandatory and interpretative parameters of Design Principle 6.3?**				
30	Have servicing requirements been incorporated into the design of the public realm and proposed buildings in line with **mandatory and interpretative parameters of Design Principle 6.4?**				
31	Has cycle parking been designed to follow **mandatory and interpretative parameters of Design Principle 6.5?**				

Item	Description	Mandatory parameters only	Mandatory and partial interpretative parameters	Both mandatory and interpretative parameters	N/A
32	Has the development been designed to conserve, enhance, connect and improve the use and access of the Borough's blue and green infrastructure in line with **mandatory and interpretative parameters of Design Principle 6.6?**				
33	Have the proposed open spaces been designed in line with **mandatory and interpretative parameters of Design Principle 6.7?**				
34	Has biodiversity been considered, protected and enhanced in the design proposals in line with **mandatory and interpretative parameters of Design Principle 6.8?**				
35	Have Sustainable Drainage Systems (SuDS) been integrated in the design proposals in line with **mandatory and interpretative parameters of Design Principle 6.9?**				
36	Has planting been proposed in line with **mandatory and interpretative parameters of Design Principle 6.10?**				
37	Have new trees been proposed in line with **mandatory and interpretative parameters of Design Principle 6.11?**				
38	If the development sits along the Gravesham Riverside, does the proposed design follow **mandatory and interpretative parameters of Design Principle 6.12?**				
39	Have buildings and spaces been designed to improve energy efficiency and resilience in line with **mandatory and interpretative parameters of Design Principle 6.13?**				
40	Have the design proposals consider retrofit of existing buildings in line with **mandatory and interpretative parameters of Design Principle 6.14?**				
41	Does the development contribute towards the provision of a rich-mix of opportunities in line with **mandatory and interpretative parameters of Design Principle 7.1?**				
42	Has development carefully considered management and maintenance throughout the design process in line with **mandatory and interpretative parameters of Design Principle 7.2?**				

"More trees should be planted and nature should be kept at the heart of each public space."

Resident's comment

Appendix B

Further guidance

Appendix

Further guidance

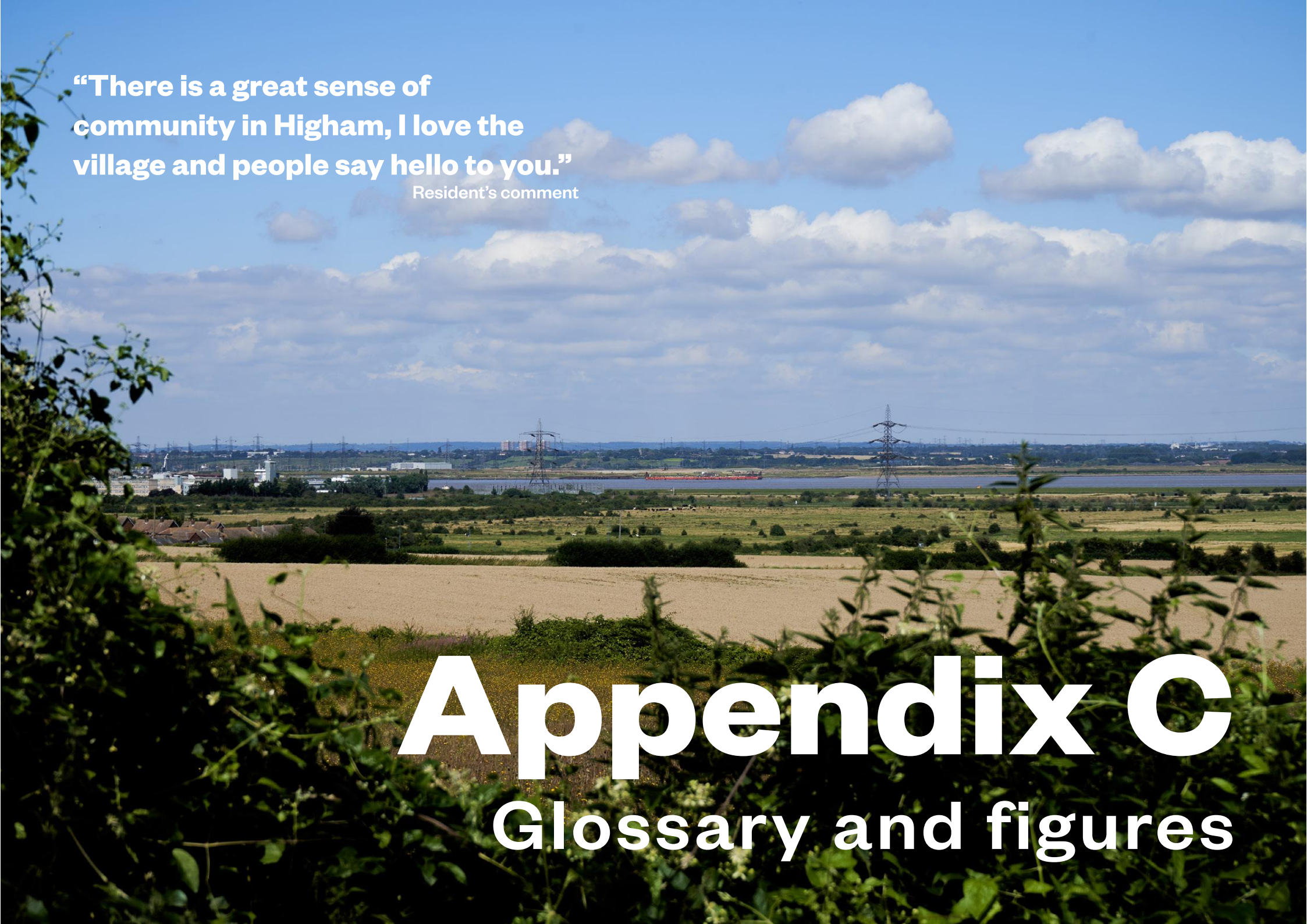
Design theme	Further Guidance
Engage	National Planning Policy Framework
	Gravesham's Corporate Plan
	National Design Guide 2021
	Gravesham's Local Plan
	Community Engagement Strategy for Gravesham 2021-2024
Identity	Gravesham's Corporate Plan
	National Design Guide 2021
	Gravesham's Local Plan
	Destination Gravesham. The Tourism and Heritage Strategy for Gravesham
Context	Gravesham's Corporate Plan
	National Design Guide 2021
	Gravesham's Local Plan
	Destination Gravesham. The Tourism and Heritage Strategy for Gravesham
Public space	Gravesham's Corporate Plan
	Gravesham's Local Plan
	Design for Play: A guide to creating successful play spaces (Play England, August 2008)
	Public Space Lessons: Designing and planning for play (CABE, October 2008).
	Voice. Opportunity. Power toolkit for youth engagement with planning process. (TCPA, 2020)
	naturalengland.blog.gov.uk/category/mental-health-and-wellbeing/
	Sport England Active Design Guidance
Built form	Building Regulations Approved Document M4(2)
	Building Regulations Approved Document M4(3)
	Gravesham's Corporate Plan
	Gravesham's Local Plan
	Gravesham's Townscape Appraisal (2008)
	Gravesham's Climate Change Strategy (2022 - 2030)
	Wheelchair Housing Design Guide
	HAPPI : Housing our Ageing Population Panel for Innovation
	BRE (Building Research Establishment) standards
	Good Homes Alliance, Overheating in new homes (2022)
	LETI, Climate Emergency Design Guide (2020)
	LETI Embodied Carbon Primer (2020)
	Net Zero Carbon Toolkit by Levitt Bernstein, ETUDE, Passivhaus Trust and Elementa
Homes and buildings	Nationally Described Space Standards
	Building Regulations Approved Document M4(2)
	Building Regulations Approved Document M4(3)
	Gravesham's Local Plan
	Gravesham's Residential Layout Guidelines SPG (2020)

Design theme	Further Guidance
	Gravesham's Climate Change Strategy (2022 - 2030)
	Wheelchair Housing Design Guide
	HAPPI : Housing our Ageing Population Panel for Innovation
	BRE (Building Research Establishment) standards
	Good Homes Alliance, Overheating in New Homes Tool and Guidance (2022)
	LETI, Climate Emergency Design Guide (2020)
	Net Zero Carbon Toolkit by Levitt Bernstein, ETUDE, Passivhaus Trust and Elementa
Movement	Gravesham's Corporate Plan
	Gravesham's Local Plan
	Gravesham's Climate Change Strategy (2022 - 2030)
	Manual for Streets 2
	Local Transport Note (LTN) 1/20 Cycle Infrastructure design, Department for Transport
	Historic England Streets for All (advice for highway and public realm works in historic places)
	Global Street Design Guide, Global Designing Cities initiative (2016)
	Walking for everyone: A guide to making walking and wheeling accessible, inclusive and desirable, Sustrans
	Kent Design Guide
	Sustrans Handbook for cycle-friendly design
	www.bicycleassociation.org.uk/wp-content/uploads/2021/06/05132-Cycle-Parking-and-Security-Standards-June-2021-REV-6.pdf
	Global Street Design Guide, Global Designing Cities initiative (2016)
Nature	Gravesham's Corporate Plan
	Gravesham's Local Plan
	Natural England National Character Areas
	Natural England's Green Infrastructure Standards (2023)
	Gravesham Landscape Character Assessment
	CIRIA SuDS Manual (C753) 2015
	Designing Rain Gardens - A Practical Guide, Urban Design London (2018)
	Water. People. Places. A guide for master planning sustainable drainage into developments (Kent County Council)
	Estuary Edges guidance
	Port of London Authority guidance - A safer Riverside
	Metropolitan Police Tidal Thames: drowning prevention strategy
Resources	National Planning Policy Framework (NPPF)
	Gravesham's Climate Change Strategy (2022 - 2030)
	LETI, Climate Emergency Design Guide (2020)
	LETI Embodied Carbon Primer (2020)
	LETI Whole Life Carbon (2020)
	Net Zero Carbon Toolkit by Levitt Bernstein, ETUDE, Passivhaus Trust and Elementa

Appendix

Further guidance

Design theme	Further Guidance
	Good Homes Alliance, Overheating in New Homes Tool and Guidance (2022)
	RIBA Climate Challenge 2030 (2021)
	LETI Climate Emergency Retrofit Guide (2021)
	There's No Place Like Old Homes, Re-use and Recycle to Reduce Carbon, Historic England
	Sustainable Traditional Building Alliance, From Retrofit to Regeneration (2021)
Lifespan	Global Street Design Guide, Global Designing Cities Initiative (2016)
	Gravesham's Corporate Plan
	Gravesham's Local Plan
Uses	Gravesham's Corporate Plan
	Gravesham's Local Plan



Appendix C

Glossary and figures

Appendix

Glossary

Term	Description
A	
Active frontage	Ground floor of a building with windows and doors facing onto the street to create interest, activity and natural surveillance. Ancillary uses such as plant rooms, refuse stores or bike stores should be carefully designed to minimise areas of inactive frontage.
Active travel	Refers to journeys made by physically active means such as walking and cycling.
Amenity	Residential amenity relates to the quality of the internal and external residential environment.
Aspect	Refers to the outlook or view from a building.
B	
Biodiversity	The whole variety of life encompassing all genetics, species and ecosystem variations, including plants and animals.
Blue infrastructure	Water elements such as rivers, canals, ponds, lakes and wetlands.
Building envelope	The external walls or roofs of an inhabited structure.
Building line	A broadly consistent line formed by the frontages of buildings along a street.
Building Regulations	Standards for the design and construction of buildings to ensure the safety and health for people in or about those buildings. The Ministry of Housing, Communities and Local Government (MHCLG) publishes guidance called 'Approved Documents' which set out ways to meet the Building Regulations.
Building Research Establishment (BRE)	BRE is an independent, research-based consultancy, testing and training organisation, operating in the built environment and associated industries.
C	
Character	The distinct appearance and feel of a place, often derived from the buildings and landscape features found in the surrounding area.
Curtilage	The area within the boundaries of a property surrounding the main building and used in connection with it. It can also include ancillary buildings and structures, such as sheds, outbuildings or garages.
Conservation Area	An area designated to manage and protect the special architectural and historic interest of a place. Conservation areas are very much part of the familiar and cherished local scene.
D	

Term	Description
Daylight and sunlight	Levels of natural light which reach a space, whether it is an internal room or external garden or amenity area.
Density	The measure of development on a specific site or geographical area. For residential uses the number of residential units per hectare is often used as a measurement.
Dual aspect	A dwelling designed with openable windows on opposite or adjacent walls, allowing for greater daylight provision, cross ventilation and views in more than just one direction.
E	
Eaves	The part of a roof that meets or overhangs the walls of a building.
Elevation	The façade or face of a building.
Embodied carbon	Embodied carbon is the amount of greenhouse gas emissions that are released to produce a material. Production includes the growing or mining, processing of the natural resources, manufacturing, transport and delivery of that material.
Energy effciency	Achieving a minimum level of energy use within a building to reduce wasted energy, whilst maintaining desired levels of heating, lighting, and cooling.
F	
Flood risk	An area of land which is subject to occasional flooding, either from rivers, sea surges, or rainwater.
Frontage	The frontage of a building is the part of the building facing the public realm, often (but not exclusively) referring to the ground floor.
G	
Gateway	Key areas of public realm that identify an entrance into a site or between character areas.
H	
Heritage assets	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest.
Houses in Multiple Occupation (HMO)	A property rented out by at least 3 people who are not from one 'household' (for example a family) but share facilities like the bathroom and kitchen. HMOs are subject to licence which must be obtained from the local council.
L	

Appendix

Term	Description
Layout	The way buildings, routes and open spaces are placed or laid out on the ground.
Local Plan	A plan for the future development of the Borough, drawn up by the local planning authority in consultation with the community.
M	
Marker building	A building with a special treatment through height, articulation, change of material, colour and/or window arrangement. Marker buildings are used to identify key gateways, areas of public realm or to inform wayfinding within Gravesham.
Massing	The combined effect of the arrangement, volume and shape of a building or group of buildings.
Mews	A narrow, intimate street with a shared surface where the street-facing elevations of buildings are built close to the edge of the public realm.
N	
Nationally Described Space Standards (NDDS)	These standards deal with internal space within new dwellings. They set out requirements for minimum internal areas for different dwelling sizes (number of bedrooms and storeys) and dimensions for key parts of the home.
National Planning Policy Framework (NPPF)	The National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. All regional and local planning policy should be in compliance with the NPPF.
O	
Open space	All space of public value, including parks, gardens, rivers, canals, lakes and reservoirs, which can offer opportunities for recreation. They also provide visual amenity and a haven for wildlife.
Overlooking	The effect of a development or building which has an outlook over adjoining land or property causing loss of privacy.
Overshadowing	The effect a development or building has on the amount of natural light enjoyed by a neighbouring property, resulting in a shadow being cast over that neighbouring property.
P	
Part L	A section of the Building Regulations which sets the standards for the energy performance of new and existing buildings.
Part M	A section of the Building Regulations which provides information about the ease of access to, and use of, buildings, including facilities for disabled visitors or occupants, and the ability to move through a building easily including to toilets and bathrooms.

Term	Description
Passive design	Methods of reducing a building's energy consumption through the design of a building's fabric, such as orientation, air tightness and thermal insulation. As opposed to 'active' means, which might include photovoltaic panels, solar thermal or wind turbines.
Passive surveillance	The ability for residents to overlook public external spaces from within their homes, thus providing safety and security to those outside.
Pastiche	Refers to the imitation of style or character of other buildings.
Pattern	Refers to the arrangement and size of buildings and their plots in a settlement and the size of street blocks and junctions.
Place	The relationship between space, setting and landscape which interact to produce characteristics attributable to a location.
Planning condition	Condition attached to a planning permission to control aspects of development which were uncertain at the point a planning consent was given. These conditions might require additional approvals for specific aspects of the development (such as the colour of materials) or might restrict the use of the site (for example limiting operating hours).
Planning permission	Formal approval sought from the council, often granted with conditions, allowing a proposed development to proceed. Permission may be sought in principle through outline planning applications, or be sought in detail through full planning applications.
Planning portal	A national website provided by the government for members of the public, local planning authorities and planning consultants. The planning portal features a wide range of information and services on planning.
Podium parking	Ground level area of covered car parking located in the centre of a courtyard block with amenity space above. Typically for residential use only
Pre-application advice	An applicant can seek advice from planning officers on proposed development prior to a planning application being submitted. This is useful to obtain an early understanding of whether an application is likely to be supported, or what things the applicant should consider as the design develops.
Public realm	Areas within the site that can be freely accessed by the general public.
R	
Renewable energy	Renewable energy is energy produced using naturally replenishing resources. This includes solar power, wind, wave and tide and hydroelectricity.
Retrofit	Retrofit is the introduction of new materials, products and technologies into an existing building to reduce the energy needed to occupy that building.
Ridge	The highest part of a pitched roof, other than the chimney.

Appendix

Term	Description
Roofline	The shape made by the outline of a roof when viewed against the sky.
S	
Scale	The impression of a building when seen in relation to its surroundings, or the size of parts of a building or its details, particularly when experienced from street level.
Section 106 agreement	A mechanism which makes development proposals acceptable in planning terms, that would not otherwise be acceptable. They are focused on site specific mitigation of the impact of development. S106 agreements are often referred to as 'developer contributions' along with highway contributions and the Community Infrastructure Levy.
Secured by Design (SbD)	An accreditation scheme run by the police which provides various design guidance setting out how buildings should be designed to be secure and resist crime.
Set backs	When the upper levels of the buildings are recessed from the building line.
Shared surface	An external area, usually between homes, where no distinction is made between footpaths/pavement and carriageway, and where priority is given to pedestrians but is also accessible to cars and other vehicles.
Shared amenity space (or communal amenity space)	Outdoor amenity space shared between residents of one or more flatted buildings and/or houses. Access may be controlled or open to the public
Single aspect	A dwelling designed with openable windows only on one wall.
Sky space	Uninterrupted space between buildings, when viewed from certain locations, to ensure that the buildings do not read as one joined up mass.
Streetscape	The appearance or view of a street.
Supplementary planning Document (SPD)	A document which builds upon and provides more detailed planning guidance on policies of an adopted Local Plan.
Sustainable Drainage Systems (SuDS)	Sustainable drainage systems (SuDS) are designed to manage stormwater locally (as close to its source as possible), to mimic natural drainage and encourage its infiltration.
T	
Terrace	A terrace is an area of external private or semi-private amenity space enjoyed by one or more dwellings above ground floor level. It is generally understood to be larger than a private balcony and usually using a set back in the massing of the building.

Term	Description
Tenure	Housing tenure describes the legal status under which people have the right to occupy their home. Tenures include, but are not limited to, home ownership, private rent and social rent.
Threshold	Boundaries between public, semi-private/communal and private spaces within the streetscape, often defined by a change in material and/or landscape features.
U	
Use class	Planning use classes are the legal framework which determines what a particular property may be used for by its lawful occupants.
W	
Wheelchair home	This refers to homes built to Building Regulation Requirement M4 (3): Wheelchair user dwellings, where the dwelling is constructed to meet the needs of occupants who use a wheelchair.

Fig 187 Siri Guru Nanak Darbar Gurdwara

Appendix

Figures

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