

# Ebbsfleet Public Realm Evaluation Framework

This design tool can be used by design teams and stakeholders to collectively review and quantify the design performance of streets and publicators.



# Introducing the Ebbsfleet public realm evaluation framework

This new tool provides a methodology for evaluating and benchmarking the design performance of streets across a wide range of design areas, to encourage street designs that are healthy for both ourselves and nature, no matter how we choose to travel.

The tool sets provide a comprehensive evaluation framework that encourages an integrated approach to safety, functionality, biodiversity, water management, social sustainability, maintenance and stewardship, to deliver loveable and long lasting public spaces.

9 indicators have been identified which cover all the design specialists involved in the design of our streets and public realm, and allows the design and consenting teams to come together to collectively review design performance. The framework is designed to be used in the following ways:

- Interpret the principles of the Healthy New Towns and Garden Communities programme into a comprehensive set of design objectives and associated guidance for public realm projects
- Provide a self-evaluation tool for project design teams during the design process
- Provide an evaluation tool for Planning
  Officers and the wider consenting teams
  within the planning process, to structure
  discussions during the designed audits
  and enable the quality of the design to be
  assessed.

### How to use the framework

The evaluation framework is structured around the 9 public realm health check indicators and is designed to be used as a Q&A checklist.

The checklist is to be scored on a simple 'traffic light' system with green representing the objectives have been meet, yellow representing the objectives have been partially meet, and red representing a failure to meet the objectives...

The requirement for future public realm project should be to;

- Secure as many 'greens' as possible,
- Minimise the number of 'ambers'
- Avoid 'reds'

A public realm scheme may not achieve all 'greens' for a variety of reasons, particularly as in many cases the indicators may need to be balanced against each other. This is especially the case in the design of streets as they require a balanced design approach.

When it is determined that improvement beyond a red may not be possible, the reasons should be recorded as a part of the design audit and agreed amongst all stakeholders.

### Variations in Size & Scale

We believe the objectives for each of the 9 indicators are achievable within a single neighbourhood masterplan, but it is worth noting that the scale of the planning application / proposal may also affect how the submitted design scores using the evaluation framework.

For example, a planning application for a neighbourhood should be able to successfully incorporate and balance all 9 of the healthy public realm indicators ,while an application for a single street may not be able to accommodate all of the outlined objectives of the 9 indicators. In the case of small scale proposals, the design team should present the adjacent context and demonstrate where the indicator is being met in the immediate context as part of the design audit.

### An integrated design approach

The evaluation framework is represented as a circular diagram of 9 healthy public realm indicators, as the ambition is to balance the complex decision making factors related to the design of the public realm. This means that no specific indicator should be prioritised to the detriment of others.

Emphasis should be placed on designs that can facilitate multiple indicators at the same time. An example of this may include the use of traffic calming build outs to add in a layer of biodiverse understorey planting or a public square that correctly positions activities to take advantage of the local environmental context.

# 9 Public realm health-check indicators

Summary

### 1 Design with the community

### Objective:

The public realm provides a platform for community engagement, reflecting the community, and inspiring residents to take ownership of their public spaces.

### 4. People feel comfortable

#### Objective:

The public realm must respond to the local micro-climate, mitigate air pollution and potential disturbance from excessive noise

### 7. Garden in the city

### Objective:

Ebbsfleet public realm is filled by colourful and memorable planting that reflects each site's ecological health, fluctuating water levels and seasonal changes.

### 2. Spaces for everyone

### Objective:

People of all ages and backgrounds enjoy using the public realm

### 5. People feel safe

### Objective:

People feel safe, secure using the streets and public spaces throughout the day.

### 8. Water sensitive design

#### Objective:

Surface water is sustainably managed by rain gardens, planting and retention areas.

# 3. Easy to walk, cycle, and access public transport

### Objective:

People chose to walk, cycle and use public transport rather than the car.

# 6. Places to meet, exercise and play

### Objective:

People are able to meet, exercise and play within the public realm.

### 9. Characterful places

#### Objective:

The public realm celebrates Ebbsfleet's history and cultural heritage to create a local sense of place.

## Design with the community

Has the public realm been co-designed with local people to provide places and activities that will support an active and healthy local community?

The long term vitality of the public realm requires engaging the local community to achieve a high level of community buy-in. To engage the local community, the design process of the public realm should actively seek out community input from the beginning and work to integrate community desires into the final design solution. This should include creating opportunities for the local community to participate in and take ownership of their public realm. This may mean the introduction of pockets of planting that is cared for by the residents - such as allotments - or providing the facilities and support necessary to hold community events.

### **RECOMMENDATIONS**

### 1. Co-design with the local community

The design of key public realm projects should be based on a co-design process to allow the local community and key stakeholders to go beyond consulting (i.e commenting on designs), and to allow them to actively participate in the design process. Co-design events use a range of creative engagement techniques to allow the community to co-develop the brief, test options, and develop design proposals.

### 2. Include spaces for communal activities

The public realm should be designed to allow residents to come together and engage collectively within their local environment. Important opportunities identified within the public realm strategy include the provision of growing spaces, planting that is cared for by local residents, interactive public art installations, play on the way, and the organisation of community events.

### 3. Provide facilities for community events and celebrations

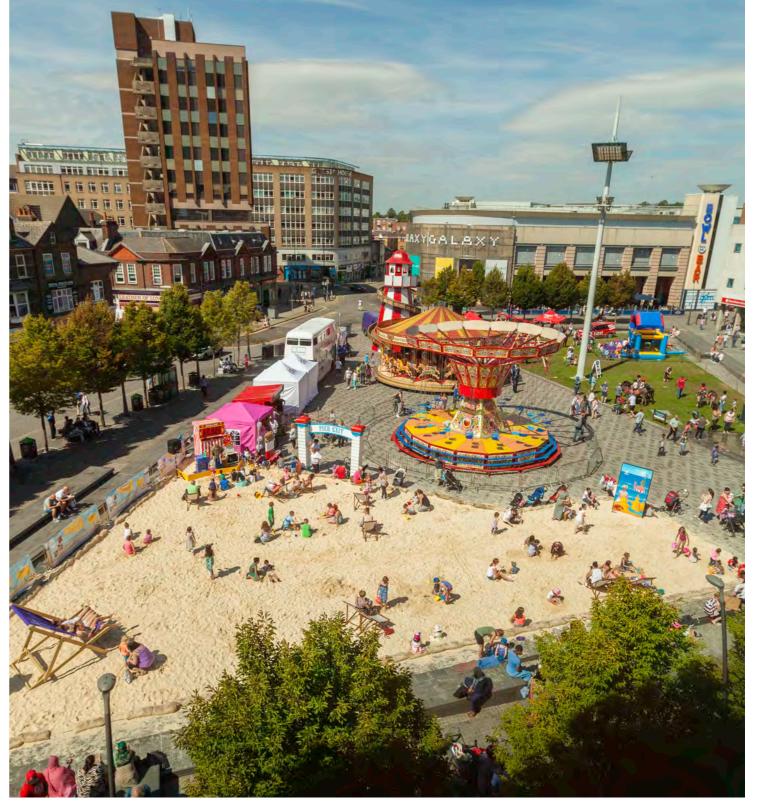
To encourage public gathering, the public squares and neighbourhood parks should be equipped with the facilities to host community events. Guidance for the facilities to be provided has been outlined within the design guidance section for the public square and the neighbourhood park typologies.

# 4. Consider local stewardship and activation of the public spaces

The design process for key public realm projects should extend beyond the delivery of the space, and explore the stewardship and activation of spaces. The community co-design workshops should start to explore events programmes, partnerships and collaborations that empower the local residents to create new initiatives and participate in helping to activate the public realm. Activities and events may range from street parties to neighbourhood festivities in the public square, and city wide festivals. Any programme of events should be curated by local community organisations and evolved to fit the desires and needs of the local residents.

## 5. Express & make visible the cultural heritage and current cultures of the local community

The design of the public realm should express the local culture. Forms of expression may include the display of art work, the integration of community events boards, or provide areas for markets and music.



St. George Square in Luton hosts community events and provides an interactive public space for the local community.

### Image: Community Workshop



Has the design process for key public spaces (local squares, local parks and neighbourhood parks) included a co-design approach, that enables at least two community-led design workshops, during the concept and design development stages?

### Image: Eastern Quarry Community Gardens



Do key public spaces provide space and associated facilities for community activities that are informed by the community codesign process, and the Ebbsfleet 'Space in the Place' Strategy?



Does the public realm include the provision of growing spaces, or planting that is cared for by local residents to encourage local residents to interact with their local environment?

Image: Victoria Square, Woking



Has the design of local public squares and neighbourhood parks been designed in a flexible manner that will allow for the hosting of community events and celebrations?

Image: Municipal Square, Crewe



Have the facilities required to host events been provided in public spaces identified for hosting community events?

Image: Elephant Park, London



Has community-led stewardship and events programming been considered as part of the community co-design workshops?

## Spaces for everyone

Has the public realm been designed to be easily accessible and useable by people of all ages and abilities?

Ebbsfleet's public realm should allow everyone to make local journeys on foot, to easily access all local facilities and public transportation regardless of the age or ability.

Accessible, inclusive public realm will support residents in choosing an active lifestyle, whilst also providing enhanced opportunities to meet fellow residents to socialise, exercise, play and create as part of an inclusive community.

### **RECOMMENDATIONS**

### 1. Universal design & accessibility

Access for all users, regardless of capabilities and age, needs to be carefully designed into all six public realm typologies. The design of the public realm should not rely on statutory minimum requirements to support universal design, but should consider typical user journeys and service journeys for key users, and encourage the safe use of the public realm by children, the elderly, and people with disabilities and visual impairment, as well as any other

### 2. Promote inclusiveness & diversity

Streets, public squares, and parks should be designed to promote inclusiveness and be comfortable to use for residents of various ages, ethnicities, and genders. This principle should be carried out through the careful consideration of proposed activities, their appeal to the various user groups, and the social dynamics created by the design.

### 3. Places to stop & rest

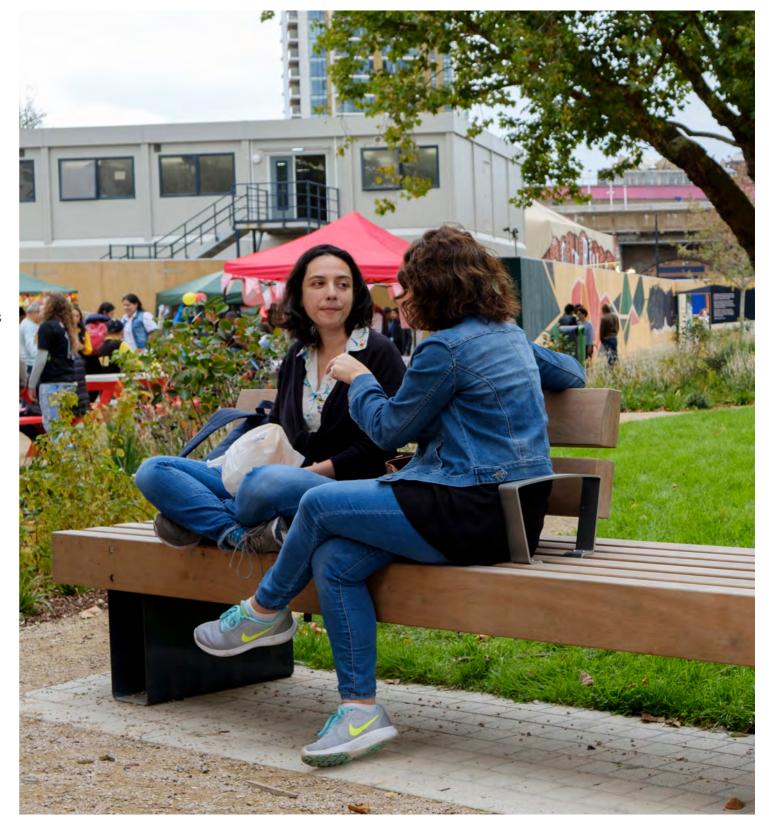
For streets and public spaces open spaces to achieve the desired level of inclusiveness, they should include places to stop and rest. This is particularly important for the inclusion of the ill, the disabled, the injured, the old, and the very young within the public realm.

### 4. A mix of quiet and active spaces

The public realm's design should include activity spaces that are complemented by quiet spaces for relaxing. The goal is to promote the use of the public realm by various user groups and create environments that creatively combine activity and places for people watching.

### 5. Encourage Interaction

Within the design of the public realm, the local community should be engaged and encouraged to animate the public realm. There is no better way to create community then to allow local residents to influence and interact with their local environment.



Elephant Park in London encourages inclusivity by providing places to rest, its accessible design, and its spatial layout.

Image: William Street Quarter, Barking



Are pavements reasonably level, and clear from obstructions to allow free and easy movement for all?

Image: Great Kneighton, Cambridge



Do the spaces meet the London Legacy Development Corporations Accessibility Guidelines for public realm?

Image: MediaCity UK, Salford



Do level 1 and level 2 streets include places to stop and rest every 200 metres, and every 50m within local centres and parks?



Are seats designed around the needs of all users? Does an appropriate level of seating have back and arm rests?



Have typical user journeys been tested within the scheme to ensure accessibility for; people with pushchairs; wheelchair users; the visually impaired, people with dementia?



Do key public spaces (local squares, local parks, major parks) provide accessible public toilets and changing facilities?



Do key public spaces ( local squares, local parks, major parks) provide water fountains?

## Easy to walk, cycle & use public transport

# Does the public realm encourage people to choose to walk, cycle and use public transport rather than the car?

Ebbsfleet is being planned and built at a transitional time in travel behaviour, particularly within urban areas. Emerging transport technologies and travel services, health-led lifestyles choices, localised congestion, and concerns around air quality and the cost of motoring are all conspiring to reduce our reliance on the car for shorter journeys.

The quality of the public realm is critical to supporting people in choosing to walk, cycle or use public transport. The following principles will serve to maximise accessibility, public realm safety, sustainable movement, and a healthier lifestyle for the residents of Ebbsfleet.

### **RECOMMENDATIONS**

### 1. Generous pavement & cycleway widths

Pedestrian pathways and cycleways should be designed to accommodate the expected flows of pedestrians and cyclist in line with the EDC recommendations. Generous widths of pavement and cycleways are especially important on routes to and from bus stops and train stations.

### 2. Crossing points & traffic calming

Crossing points on all streets should be located on pedestrian desire lines, clearly marked and easily understood by drivers, pedestrians, and cyclists. At crossing points with more than 2 lanes of traffic, super-crossings or resting points should be provided. Additionally, traffic calming should be integrated into the street design and used to both slow traffic and promote a pedestrian friendly environment. Additional details regarding traffic calming and junctions can be found within the design guidance in Section 4.

### 3. Continuous & legible pathways

Pedestrian pathways and cycleways should be continuous and provide fluid linkages between adjacent public realm typologies. Wayfinding should be promoted through the inclusion of signage, markings, and paving elements in accordance with the design guidance in Section 5: Hard Landscape Strategy.

### 4. Limit conflicts between different flows of movement

Pedestrian paths, cycleways, and bus stops should be designed to minimise conflict and promote a safe, smooth flow of various movement types. Additionally, special care should be taken in the design of intersections to avoid potential movement conflicts.

### 5. Safe & accessible cycle routes

Cycle routes should be designed to make cycling safe and attractive for everyone. Cycle routes should be designed to limit their steepness and maximise use. On streets, cyclist safety should be promoted through clear visibility lines and limiting conflicts with vehicles.

#### 6. Multi-modal bus stops

Bus stops should be designed to encourage multi modal transport by accommodating bike parking, bus shelters, seating areas, and crossing points nearby.



The public realm of MediaCity UK in Salford is designed to encourage walking, bicycling, and public transportation use.

Image: Queenstown Road, London



Are pavement widths greater than the minimum set-out in the Ebbsfleet prototype street designs? (see Section4)

Have pavement widths been sized to support future growth capacity modelling? (see Ebbsfleet Active Travel Model)

Is the street designed in a way to avoid clutter and limit obstacles on the pavement, such as street lights, bins, or signs?

Image: Kings Cross, London



Is the volume of traffic and design speed appropriate for the type of street?

Is the street or public space designed to slow traffic speeds and promote the safe movement of pedestrians and cyclists?

Image: Great Kneighton, Cambridge



Are crossing points located on key desire lines and aligned with the strategic and local movement framework?

Have side junctions been carefully designed to support the safe and direct flow of pedestrians and cyclists over cars (reduced radii, raised tables etc)



Are cyclists accommodated through dedicated cycle paths in line with the cycling strategy and public realm design guidance?

Have cycleway widths considered the future growth capacity modelling in the Ebbsfleet Active Travel Model?



Can people cycling easily stop and secure cycles at convenient locations for accessing shops and services?

Does the amount, cost and availability of car parking at local amenities fit with the goal of encouraging people to walk, cycle, and use public transport over using the car for local journeys?



Is the street an attractive place to wait for the bus? Are seating areas, bus shelters, and bike parking provided nearby?

Is it easy for people to get to bus stops and change between different types of transportation (e.g. from bus to cycle)?

Image: Hammarby Sjostad, Stockholm

Image: Carlisle Town Centre

Image: Bank Street, Ashford

## People feel comfortable

# Does the public realm respond to the local microclimate, mitigate air pollution and limit excessive noise?

Personal comfort is a critical aspect to maximising the potential use of the public realm; therefore, the design of the public realm should enhance the micro-climate and mitigate environmental nuisances such as air and noise pollution. In relation to climate, it is important that high winds, rain, and the over exposure to sun are planned for through spatial planning, the provision of shelter, and the strategic use of plant material. Additionally, air and noise pollution should be mitigated by limiting vehicle speeds, reducing the need to drive, and limiting disruptive deliveries. The result will be a public realm that is more inclusive, more vibrant, and longer lasting.

### **RECOMMENDATIONS**

#### 1. Good Orientation

A foundation for successful social spaces, play areas, squares, and parks is a careful attention to the orientation of the space and the resulting microclimate. Proposed designs should identify areas of excessive shading and open exposure. This analysis should be use to inform the location selection for key recreational and social spaces.

#### 2. Protect from Wind and Rain

Good orientation should be complemented by a public realm that pacifies strong winds and provides shelter from inclement weather. Designers should identify prevailing winds and clarify their strategy for mitigating the impact of winds. Additionally, cover should be provided along streets and within public open spaces. Cover can include canopies or awnings, bus stop shelters, or other site specific solutions.

### 3. Utilise Trees and Planting to Support Microclimate

Trees and planting should be designed to enhance the local microclimate. Trees should be used to provide shade and limit the over exposure to sun in large open spaces. Lower levels of planting can be used to screen against harsh winds. Additionally, planting can help to screen visual nuisances and improve air quality.

### 4. Mitigate the effects of noise pollution

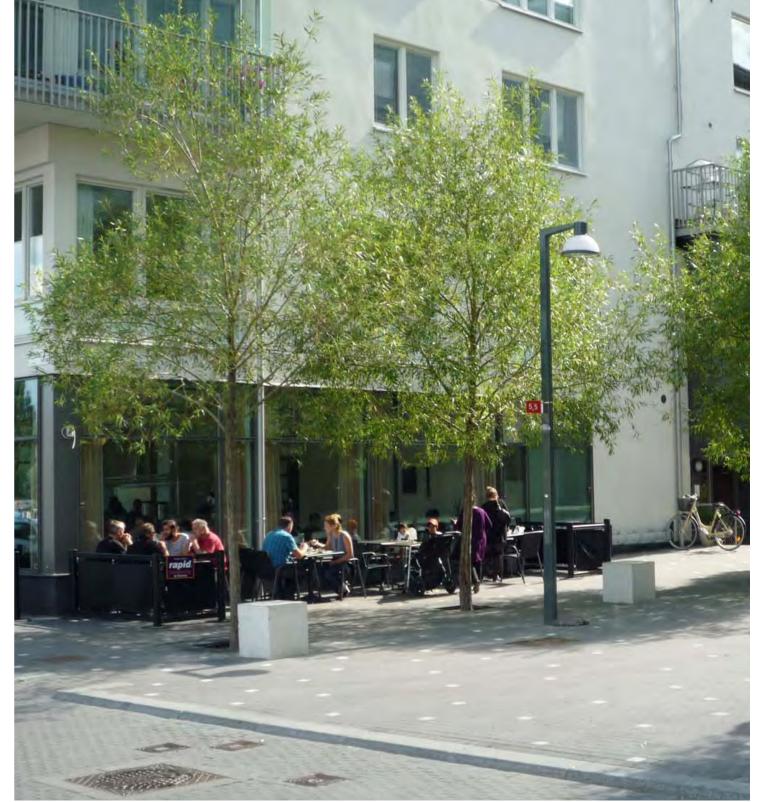
An over abundance of noise within social spaces, play areas, and streets can result in the under utilisation of the public realm. Noise pollution should be mitigated through the layout of the public realm, the reduction of vehicle speeds, and limiting disruptive deliveries.

#### 5. Promote clean air

Clean air should be promoted through the design of streetscapes and public open spaces that reinforce the modal shift toward sustainable forms of transportation, the promotion of low or zero emission vehicles, and the promotion of a green public realm.

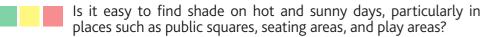
### 6. Clean and Well Maintained

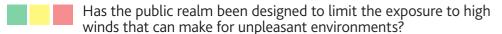
The public realm should be designed in accordance with a sustainable maintenance strategy that aligns with the requirements of the selected long term management body. Clean and well maintained public spaces are critical for the public realm to stand the test of time and evolve with the neighbourhood.



Cafe strategically located to respond to the local microclimate in Hammarby Sjostad, Stockholm









Is it easy to find shelter in the public realm if it rains? For example, do bus stops have shelters?

Is shade and shelter provided in ways that make the street a more attractive place, e.g. through tree planting?



Has the maintenance strategy been agreed with those responsible for its future maintenance and been proven financially sustainable within the stewardship scheme?

Are site furnishings such as litter bins sufficiently provided?

Image: Bus Shelter - Malmo, Sweden





Are social spaces and play areas located in places where people will not have to raise their voices to hold a conversation?

Does the design mitigate disturbing environmental factors (e.g. through use of planting areas, level changes, walls, etc.)?



Is the public realm designed to reduce the sources of air pollution by encouraging a modal shift away from motor vehicles?

Are there abundant trees in the streets and public spaces to absorb particulates from vehicles?

Image: Walworth Road, London



Are the materials used to surface the road reasonably smooth to help reduce noise from vehicles on the road?

Image: Tumbling Bay Playground, Queen Elizabeth Park

Image: Lacuna, Kings Hill

Image: Ingress Park, Kent

### Feel safe and secure

# Do people feel safe and secure using the streets and public spaces throughout the day?

It is critical that public spaces are safe, secure and comfortable to use because people are less willing to walk, cycle or use public transportation if they feel unsafe in the public domain. By creating a safe environment throughout the day, the public realm will support the ambitions for an inclusive public realm, a healthier and more active lifestyle for residents, and promote community engagement. Additionally, the public realm will foster the safety of children walking or cycling to school, accessing play facilities, and socialising with friends.

### **RECOMMENDATIONS**

### 1. Traffic calming & limiting speed

A wide range of traffic calming should be integrated into the streetscape to both limit vehicle speed and encourage a pedestrian and cycling friendly environment. Traffic calming should be tackled in the first instance through the design of the street and the buildings and landscape tat enclose it, and then through specific traffic calming devices, which should be selected to fit both the street type and its expected traffic volumes.

### 2. Convenient & safe crossing points

A critical aspect of a pedestrian friendly public realm is to locate crossing points at the most convenient locations for pedestrians. The safety of crossing points should be ensured through good visibility, fitting the width to expected flows, and integrating traffic calming devices. Crossing with signals should provide enough time for everyone to cross without feeling rushed.

### 3. Limit conflicts between different flows of movement

Conflicts between pedestrian, cycle, and vehicular flows should be minimised. Special attention should be paid to ensuring the visibility of cyclists, limiting conflicts with pedestrians exiting buses, and legibility of street intersections.

### 4. Active edges & social spaces

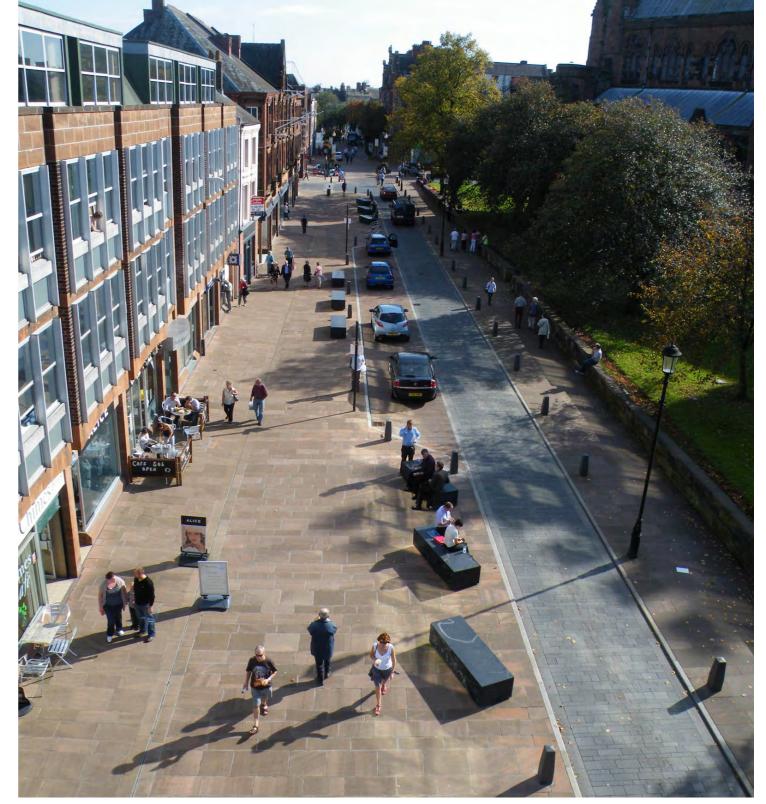
A safe public realm is designed to encourage natural surveillance through active frontages. The regular movement of people along adjacent frontages activates the space and helps to create a safer environment for all.

### 5. Windows overlooking streets and public spaces

Buildings adjacent to streets and public spaces should be designed so that they front the public realm. Windows should be oriented to overlook areas of activity.

### 6. Lighting

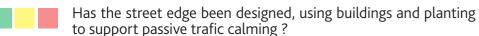
The public realm should be sufficiently lit to support accessibility, safety, and security requirements during the night, whilst balancing issues of light pollution for adjoining residents.



Castle Street Regeneration in Carlisle combines cafe seating, active entrances, and shared space principles to create a safe environment.



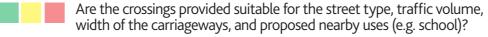








Can people cross the road safely at the point they would find most convenient?





Can pedestrians and cyclists cross safely, directly and comfortably at the identified junctions and crossing points?

Is there good visibility so that people crossing can see oncoming traffic and be seen by drivers?

Image: Eastern Quarry, Ebbsfleet Garden City





Are car parking and loading bays located to create a safe environment for pedestrians to cross the street?

Where pavements and crossings get crowded (e.g. bus stops, school entrances, etc.), is there enough space for people to wait and cross at peak times?



Have the entrances to side streets been narrowed and raised to pavement level to give clear priority to people walking?

Image: Heartlands, Redruth



Does the street lighting illuminate the pavement as well as the carriageway?

Is the public realm surveillance by active edges and overlooking windows?

Image: East Village, London

## Places to meet, socialise, exercise and play

# Are there places for people to meet, exercise and play within the public realm?

Streets and public spaces that provide dedicated places for people to come together and socialise, exercise and play will generally attract more people to use them. Providing outdoor facilities can encourage people to be individually more active, and collectively participate in more communal activities and events. Encouraging more people to spend longer in the public realm will also provide more 'eyes on the street' improving safety and security, and encouraging even more people to use the public spaces to travel locally, and socialise.

### **RECOMMENDATIONS**

### 1. Range of activity spaces

The public realm should be diverse and varied to encourage visual interest and walkability. To achieve this buildings should have varied frontages and the public realm should engage pedestrians through textured planting, public art, or unique lighting installations.

2. Seating and social spaces for all occasions
Seating should be generously provided within the public realm. Opportunities to sit down and rest should be provided and social spaces should be designed in a way that encourages people to socialise in groups.

### 3. Places to play

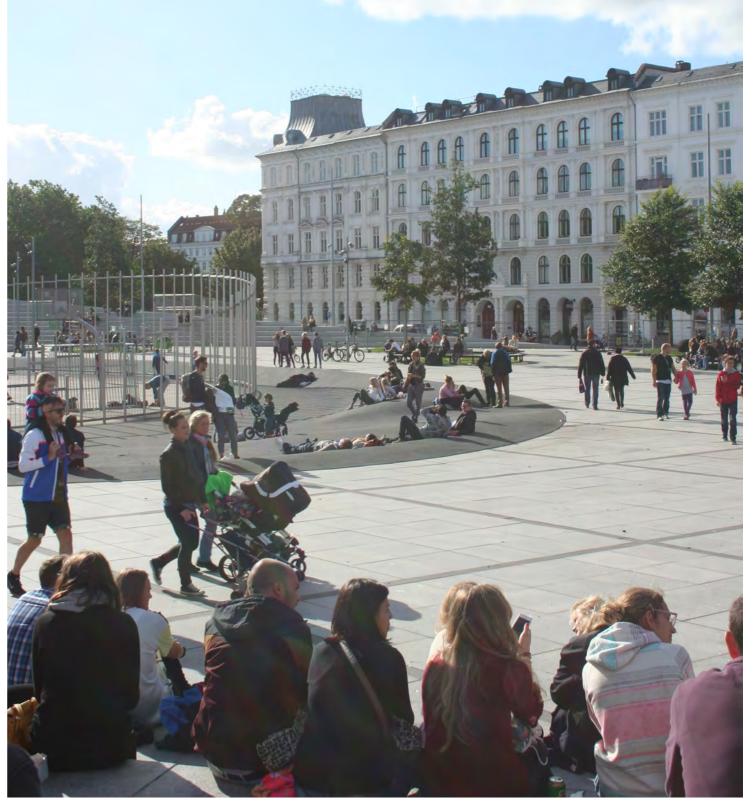
Local play areas should be provided within the parks, squares and schools as required by statutory requirements. These play areas should be linked together by kid friendly pedestrian paths and play on the way features integrated into the streets and public realm.

### 4. Sports & trim trails

The inclusion of flexible kick about spaces and trim trails should be encouraged within the public realm. A generous kick about area should be included within all neighbourhood parks and trim trails should be used as connective element within green corridors.

### 5. Spaces to grow

Opportunities should be taken to incorporate places to grow food and support the Edible Ebbsfleet programme with public realm. There are often small pockets of land within public realm and local parks that are ideally suited for community gardens.



A combination of active recreation and passive social spaces creates a dynamic atmosphere in Israel Plads, Copenhagen.



Does the street, public square, or park provide appropriate opportunities for informal play and social activities?



Are seats in an attractive location and a comfortable distance from heavy traffic?

Is the seating place in a way that encourages people to meet, socialise and sit in groups?



Is there enough room for people to find somewhere away from the flow of pedestrians to stop when they need to?

Are seats located in areas that are overlooked by nearby buildings to help reduce the potential for antisocial behaviour?

Image: Elephant Park, London



Does the public realm encourage an active lifestyle for children & youth through the inclusion of kick-about spaces, play areas, and sport facilities?

Is a healthy lifestyle for residents encouraged through the inclusion of high quality walking paths, exercise facilities, and trim trails?

Image: MediaCity, Salford



Have elements such as walls, planters or steps been designed to provide places for people to rest or socialise?

Have active edges, cafés, and spill-out zones been incorporated to animate the public realm?

Image: Willesden Green, Brent



Have social spaces and play areas been sighted in comfortable environments and microclimates that promote extended seasonal use?

Image: Tumbling Bay Playground, Queen Elizabeth Park

Image: King Cross, London

Image: Elephant Park, London

## Garden in the city

# Is the public realm filled by memorable planting that reflects each site's design narrative and seasonal changes?

The 20th century Garden Cities are defined by the green character of their public realm and this has resulted in their enduring popularity. Their inclusion of a generous provision of parks, landscaped open spaces, and tree lined streets has also been identified as having important sustainability and climate change resilience benefits by the Town and Planning Association (TCPA 2014, para. 59). The objective at Ebbsfleet Garden City is to build on this tradition and further innovate through the following design principles.

### **RECOMMENDATIONS**

## 1. Preserve and Enhance Existing Biodiversity & Ecology

The planting design should promote the ecological health and biodiversity of the site. A key principle is to preserve the existing ecology and biodiversity and promote its enhancement through water sensitive design, urban forestry, and native plants.

### 2. Tree Lined Streets & Public Spaces

Street trees should be generously provided in accordance with the design guidance. The aim for the Ebbsfleet Garden City is to create robust, green streetscapes that build on the Garden City legacy. In addition, parks and public squares should be planted with trees to provide spatial structure and reinforce the new urban forest.

### 3. A Nature Inspired Planting Approach

The planting palette for the verges, the parks, and the squares should promote a nature inspired planting palette in accordance with the outlined planting strategy. The planting strategy outlines the key principles for creating a naturalistic planting aesthetic inspired by the existing landscape character areas and pictorial planting approach.

### 4. Edible Ebbsfleet

Kent's role as the Garden of England should be actively promoted through the integration of growing spaces in the parks, innovative garden streets, and orchard trees. Collectively, the public realm should form a series of productive landscapes that provides food for local residents and links to Ebbsfleet's agricultural legacy. The provided food should support healthy eating and the Ebbsfleet Healthy New Town Programme.

### 5. Year Round Beauty

For each public space typology, trees and understorey planting should be selected to create rich seasonal experiences. Utilising the provided planting approaches, landscape architects should design planting that delivers seasonal change and delight.

### 6. Planting to Meet the Site Conditions

All planting should be designed to suit site conditions, to ensure its long term success. Critical aspects to account for include: soil quality & permeability, local microclimate conditions, and sustainable maintenance requirements. Detailed design guidance for these critical aspects have been provided within chapter 6 of this document.



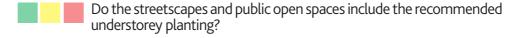
A layered planting bed with changing seasonal interest at Elephant Park in London



Is the existing landscape ecology and biodiversity preserved and enhanced?



Have the streets and public open spaces been generously planted with trees to provide the required health and social benefits?





Does the planting design align with the pictorial or naturalistic looking planting approach outlined in planting strategy (chapter 6)?

Does the planting maintenance align with the maintenance requirements outlined in the planting strategy (chapter 6)?

Image: Lightmoor Village, Telford



Does the public realm integrate growing spaces and productive landscape elements that connect to Ebbsfleet's Garden of England heritage?

Does the planting strategy build on the site's history and cultural heritage?

Image: Honour Lea Avenue, Stratford



Has the planting been designed to create seasonal change and interest throughout the year?

Image: Queen Elizabeth Park, London



Have the plants been selected for the specific site conditions (e.g. soil, wind, etc.) to limit future maintenance & replacement costs?

Do the proposed planting details (e.g. tree pit details) align with the technical guidance provided in the planting strategy (chapter 6)?

Image: Apple Orchard, Wisley

Image: Pictorial Meadows, Verge Planting, Sheffield

Image: Warren Lane, Woolwich

## 8. Water sensitive design

# Does the public realm manage water sustainably to minimise flooding, and promote passive irrigation?

The Ebbsfleet Implementation Framework identifies that the public realm will be shaped by following water sensitive urban design principles. The objective is to integrate water cycle management into the public realm through sustainable urban drainage systems (SuDS) to slow surface water runoff, to expand water storage capacity, to prevent water pollution, to create an added layer of flood resilience, and to add recreational value. The following principles should be integrated across the various public realm typologies to create a connected system that adds both visual interest and biodiversity to Ebbsfleet Garden City.

### **RECOMMENDATIONS**

# 1. Fit system to Topographic & Hydrologic Conditions

Ebbsfleet is characterised by a distinct topography, hydrologic conditions and catchment areas. Utilising the designer's site analysis, the public realm should be designed following water sensitive urban design principles that build from the site's existing conditions.

### 2. An Integrated Approach

Sustainable surface water management works best when it is implemented across various public realm typologies rather than in isolation. The goal is to develop a connected surface water management system that functions at a neighbourhood scale to collectively slow runoff and expand surface water storage capacity.

### 3. Use SuDs to Create Public Realm Value

Sustainable urban drainage systems (SuDS) should be designed to create recreational value and visual amenities. Distinctive SuDS features such as wetlands and rain gardens should be designed to enhance the recreational value of the parks and SuDS should be used to add value through its integration in street verges or use as gateway focal points.

- 4. Slow Surface Water Runoff to Prevent Flooding Utilising swales, retention areas, rain gardens, and tree planting the public realm should be designed to slow surface water runoff and create an added layer of resilience against flooding. Using the recommended integrated design approach, SuDS should expand storage capacity and clean surface water runoff.
- 5. Rain Gardens & Planting for Water Fluctuation Retention areas should be complemented by a planting strategy that can adapt to varying levels of water inundation and provide a qualitative landscape both in times of drought and seasonal periods of rain. Ideally, retention areas should take the form of rain gardens and use the provided planting guidance for rain gardens.

### 6. Plant to Enhance Local Biodiversity

Sustainable urban drainage systems (SuDS) and the proposed water bodies should be designed to enhance local biodiversity. This should be accomplished through the use of natural edges along water bodies, the use of native vegetation within rain gardens, the use of SuDS features to create connected landscape corridors.



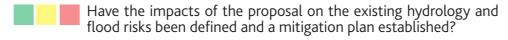
Distinctive SuDs feature integrated into a neighbourhood at Barking Riverside



Has the site appraisal identified existing topography, drainage corridors, retention areas, water quality issues, and soil conditions to establish the best suitable areas for SUDS?



Has the site appraisal identified flooding risks and the affected local catchment area?





Does the proposal take an integrated approach to water sensitive design across the various public realm typologies (e.g. connecting open space SuDS features with retention areas in streetscapes)?

Image: Western Harbour, Malmo



Has the proposal slowed surface water runoff and expanded the storage capacity in line with this documents ambitions?

Has the inclusion of SuDS been used to enhance the local biodiversity and ecology in line with the indicator 7?

Image: Barking Riverside



Are the proposed SUDS features integrated in a way that creates added value (recreational, distinctive gateway focal point, visual amenity, etc.)?

Image: Portland, USA



Have retention areas been developed as rain gardens?

Have the plants been selected to handle the varying levels of water inundation that could be reasonably expected?

Image: East Village, Stratford

Image: Queen Elizabeth Park, Stratford

## Characterful places

# How does the design celebrate Ebbsfleet's history, landscapes and cultural heritage to create a local sense of place?

Ebbsfleet sits within a distinctive landscape of cliffs and gorges, lakes and rivers, and an area rich in history. All of these references can be used to create richly characterful streets and public spaces, which have a unique sense of place that can inspire civic pride, a common identity and a sense of ownership.

### **RECOMMENDATIONS:**

### 1. Preserve the existing landscape features

Ebbsfleet includes remarkable chalk cliffs, undulating hills, natural gorges, woodland, marshes, and a variety of water bodies. The design of the public realm should preserve these distinguishing features and use them to establish a distinctive sense of place.

### 2. Enhance the presence of chalk and water

Ebbsfleet's chalk cliffs and water bodies are landscape features that provide an immediate sense of place derived from the local history. These distinctive features should be integrated and enhanced through the design of the public realm.

### 3. Protect and enhance prominent Views

The open views of the Thames Riverside and the hilltops of the Ebbsfleet River Valley should be protected and enhanced. Additionally, the enclosed views of quarry landscapes should be identified and key view corridors within the quarries should be enhanced to strengthen their sense of place.

### 4. Celebrate Ebbsfleet's history & cultural heritage

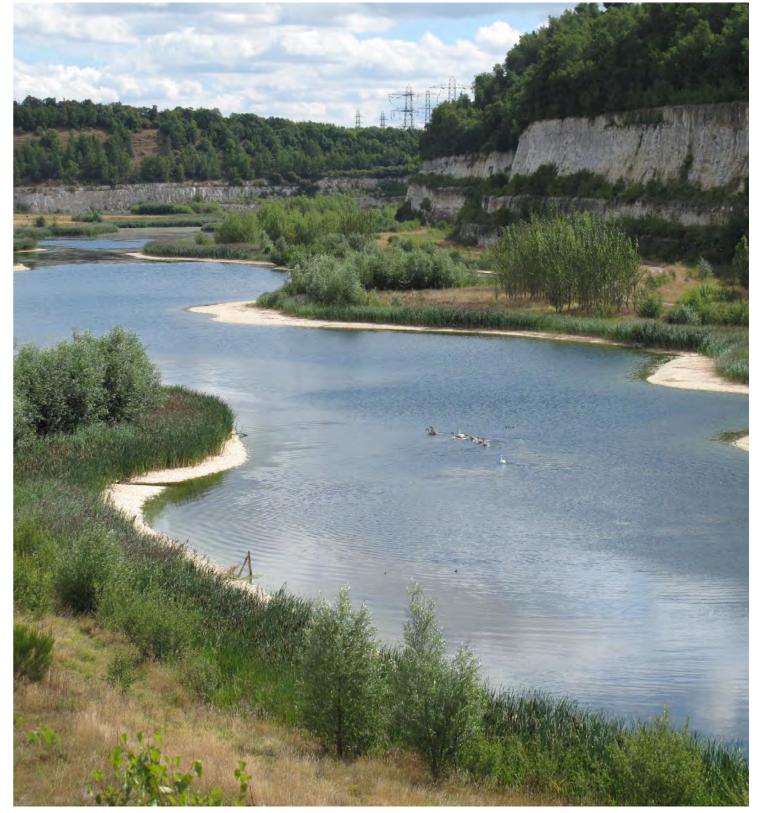
Ebbsfleet has a rich history that includes archaeological artefacts, pleasure gardens, and industrial heritage. Additionally, Kent has a unique cultural heritage that includes vernacular architecture, local landscape terminology, and it's moniker as 'The Garden of England.' This unique site heritage should be utilised to enrich the design of the public realm, develop distinctive design narratives, and connect Ebbsfleet's Garden City back to its deep roots.

#### 5. Public Art

Public art should be prominently positioned within primary civic spaces, and designed to creatively interpret the site's local history, culturally significant moments and contemporary culture.

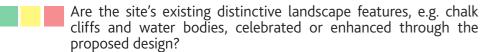
#### 6. Utilise local materials

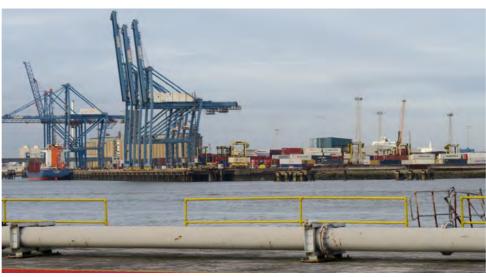
The material and furniture palette for the public realm should reinforce Ebbsfleet Garden City's sense of place by utilising the material palette established as part of the public realm strategy. This material and furniture palette was established through a landscape character assessment of the existing landscape and a review of the locally available materials.



The lake at Eastern Quarry was designed to enhance the existing undulating chalk cliffs and create a strong sense of place.







What is the distinctive design narrative that has been derived from the landscape and cultural heritage to inform the design character?



Are Ebbsfleet's industrial heritage and assets preserved and celebrated for their cultural value?

Image: Ebbsfleet River, Ebbsfleet Garden City



Does the proposed material palette respond to the project's defined design narrative, and reference the material palette in Section 5 of this document?

Image: Tilbury Docks from Northfleet Embankment, Ebbsfleet Garden City



Does the planting strategy respond to the project's defined design narrative?

Does the planting scheme align with the Planting Strategy in Section 6 of this document?

Image: Blue Lake, Ebbsfleet Garden City



Do proposed public art pieces respond to the local history or cultural heritage and have they been prominently positioned?

Image: Swanscombe Marshes, Ebbsfleet Garden City

Image: Eastern Quarry Orchard, Ebbsfleet Garden City

Image: Northfleet Riverside, Ebbsfleet Garden City

