

# GREEN INFRASTRUCTURE STRATEGY

## IMPLEMENTATION: LANDSCAPE LED DESIGN

You should read this document after reading  
[The Primer](#) if you are:

A Developer / Designer / Authority Officer  
who is designing, assessing or delivering  
masterplans and developments with new green  
and blue spaces



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# HOW TO USE THIS DOCUMENT

## Purpose of the Strategy and Parts

The purpose of the Strategy is to ensure a strategic and holistic approach is taken to protecting, maintaining and enhancing the ecology, landscape and heritage in the District.

The Primer (Part 0) provides an overview of the Strategy and its purpose, commentary on the existing Green Infrastructure assets in the District, and the Vision and Objectives of the Strategy. The other Parts of the Strategy should be read in conjunction with the Primer. These are:

1. Implementation: Enhancing our Existing Network

This Part provides guidance on:

2. Implementation: Landscape-Led Design

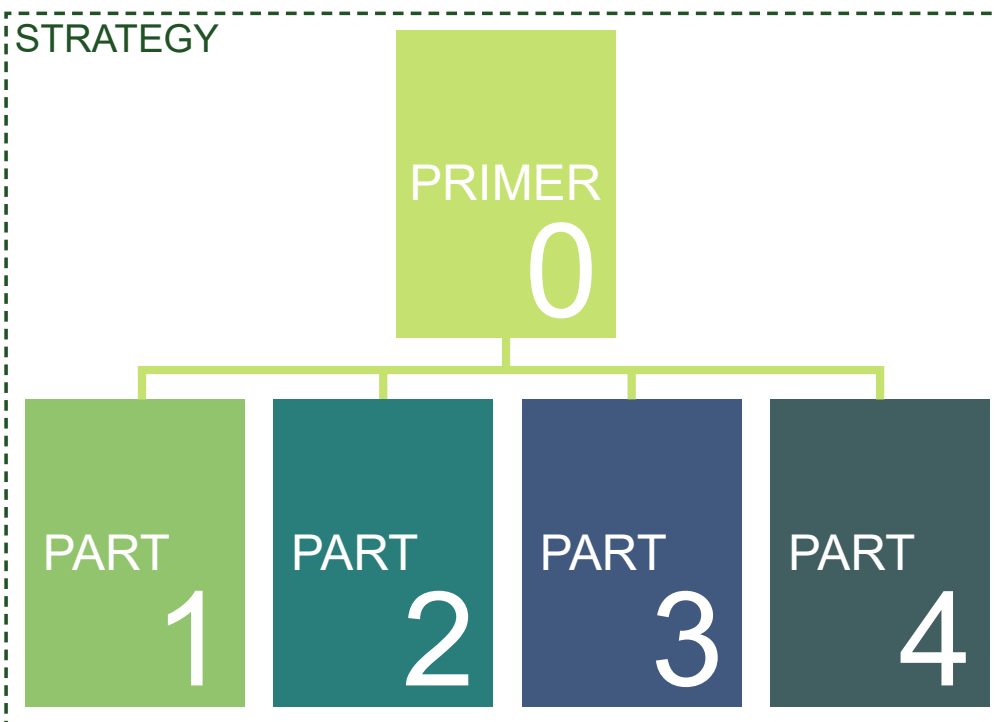
It provides:

- The Council's expectations for achieving high quality landscape-led design through the design and masterplanning of development sites
- Approaches for delivering multifunctional high quality places, including case studies for different types of green and blue spaces
- Information on maintenance and stewardship for these types of projects

The other Parts of the Strategy cover:

3. Implementation: Green Infrastructure in Strategic Allocations

4. Implementation: Infrastructure Enhancement Projects



# HOW TO USE THIS DOCUMENT

## **Who will use the Strategy and Part 2?**

The Strategy comprises four parts. Anyone using the Strategy and the associated guidance and projects should read the [Primer](#) first, to familiarise themselves with the purpose, context and vision of the Strategy.

This Part of the Strategy (2. Implementation: Landscape-Led Design) is primarily for developers, designers and council officers who are designing, assessing and delivering masterplans and developments which are required to provide new and enhanced green and blue infrastructure assets. The guidance contained in this Part of the Strategy should be read in conjunction with the Council's [Strategic Masterplanning Briefing Note](#) (October 2018). Whilst not all larger scale sites will be required to prepare a Strategic Masterplan the principles and process set out in the Briefing Note provides useful information for all developers of larger scale sites .

## **When to use this document?**

When designing a masterplan or development proposal the Council expects that a landscape-led design approach is followed from the outset, as set out in Part 2. Guidance and case studies are provided of multifunctional high-quality green and blue spaces.

# THE ROLE OF DESIGN

# 2.1

## 2.1 THE ROLE OF DESIGN

### The Role of Design in New Development

The success of new and enhanced Green Infrastructure assets is not just about the quantity provided. It also needs to be of a high quality. This can be best achieved by taking a design-led approach and, wherever possible and appropriate, should maximise the opportunities to create multifunctional spaces as this can enhance their attractiveness and therefore their use. The benefits to communities and the environment can be lost if a narrow and rigidly categorised approach to Green Infrastructure provision and enhancement is taken.

The Council, through the policies in its emerging Local Plan, requires all development proposals to demonstrate that Green Infrastructure provision is of a high-quality design which supports this multifunctional approach, where this is appropriate. How this can be done and what factors need to be considered are outlined in this Part of the Strategy.

Throughout the process of designing developments, proposals must clearly demonstrate how they deliver on the vision and objectives of this Strategy. Design should be landscape led and be integrated from the initial planning stage and continue to be so throughout the design, planning and implementation stages.

The best design and development outcomes will be delivered by engaging the best design consultants. It is important that the design process is iterative and is a collaboration between the Council's officers, the development design team and stakeholders. Engagement with the Council's Quality Review Panel can be hugely beneficial to all Parties by securing objective and impartial advice at key stages in order to achieve the best possible outcome for both new and existing residents.

Design quality of Green Infrastructure proposals in new developments can be assessed using the Green Infrastructure Submission Checklist in EFDC's [Sustainability Guidance / Major Developments \(+10 units\) Draft October 2020](#).



Accordia, Cambridge by Grant Associates

## 2.1 THE ROLE OF DESIGN

Initial work necessary to inform a Landscape Led approach to masterplanning is set out below:

### Survey and Analysis

- Researching, surveying and analysing the site and its context, at different spatial geographies
- Particular attention should be paid to landscape character, landscape features, views, ecology, flooding and water, trees, movement networks within the site and the relationship with, and connections to, nearby communities and Green Infrastructure assets

### Identifying Opportunities

- Identifying ways to connect, develop and enhance existing Green Infrastructure in and around the site
- Prioritising pedestrians, cyclists and, where appropriate, horse-riders by identifying links to existing communities and places, using existing footpath / cycleway/ bridleway networks and public transport including identifying the potential for their enhancement

### Landscape as the Driver for Design

- Using the identified opportunities to shape the site layout, so landscape provides the framework that informs the design of the layout and built form of the scheme
- Embedding the multifunctional design principles described in this Part of the Strategy, where appropriate, in order to create high quality Green Infrastructure assets for the benefit of both new and existing communities
- Using the techniques set out in this Part of the Strategy to develop a comprehensive strategy to secure the long-term management of the Green Infrastructure assets created

### Communicating Design

- Ongoing engagement with Council Officers through regular meetings to support and inform the design progress
- Using illustrative tools such as sketches, images of real-world examples, drawings and models to provide an understanding of how these spaces and places will look and are intended to work, and how they relate to the development's built form and its surrounding context
- Engaging with local communities and stakeholders throughout the design process and using feedback to develop positive design responses and the creation of a successful Masterplan or development proposal.

# DELIVERING MULTIFUNCTIONAL SPACES

# 2022

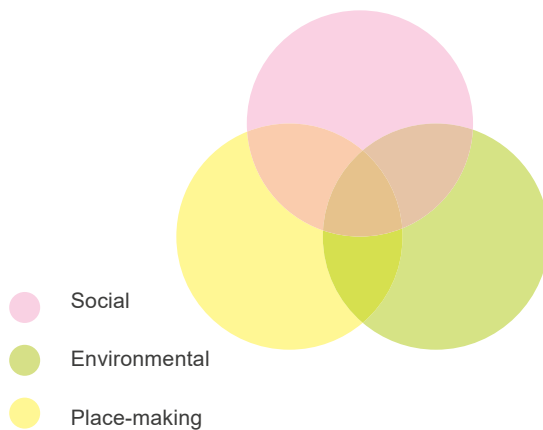


## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Design And Multifunctionality

These pages provide more detail about how multifunctional places and spaces can be delivered. They identify the approaches and opportunities that can be integrated into Green Infrastructure – both existing and new. These opportunities should be used as part of a package of measures to enhance the attractiveness, use and function of Green Infrastructure for all. The Council will expect proposals for Green Infrastructure provision to incorporate a multifunctional approach. However, in some specific cases, such as where a site is being provided as a mitigation measure in relation to existing ecologically important assets, or to enhance biodiversity where public access would not be appropriate, opportunities to take this approach may be more limited.

Multifunctional spaces as an outcome of good landscape led design incorporate a balance of social, environmental and place-making functions. In the following pages each type of Green Infrastructure element is assessed against these three functions using the diagram below:



Example of multifunctional space in the Queen Elizabeth Olympic Park, Stratford

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Natural And Semi Natural Greenspace

The [Council's Open Space Strategy 2017](#) (EB703) defines Natural and Semi Natural Greenspace as including:

*'... woodland, urban forestry, scrub, grasslands, open access land wetlands and derelict open land. Maintenance is usually informal, but may include elements of intervention such as coppicing for the long-term health and natural balance of woodland, flail cutting of meadow to increase biodiversity, and clearance of water habitats.'*

As described in the [Green Infrastructure Strategy Primer](#), there is a significant amount of Natural and Semi-Natural Greenspace within the District which is well located in relation to towns and villages. However, some smaller natural greenspaces have issues of accessibility and legibility.

In terms of ecology, the District benefits from high quality habitats, but they can often be isolated. Woodland habitats beyond the Epping Forest are sparsely distributed across the District, in which currently provide only a limited capacity for biodiversity, recreational and carbon capture benefits.

#### Considering The Role Of 'Natural' Open Space

Natural open space has a significant role to play in peoples' lives if they are attractive, safe and easy to access. It is important therefore to make these spaces and their rich cultural and ecological heritage visible. Natural open spaces can also support the Council's aim to become a carbon neutral District by increasing the number of trees, planting and connected habitats to support an attractive network of spaces and corridors.



Knepp Wildland Project in West Sussex



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### How Do We Get There?

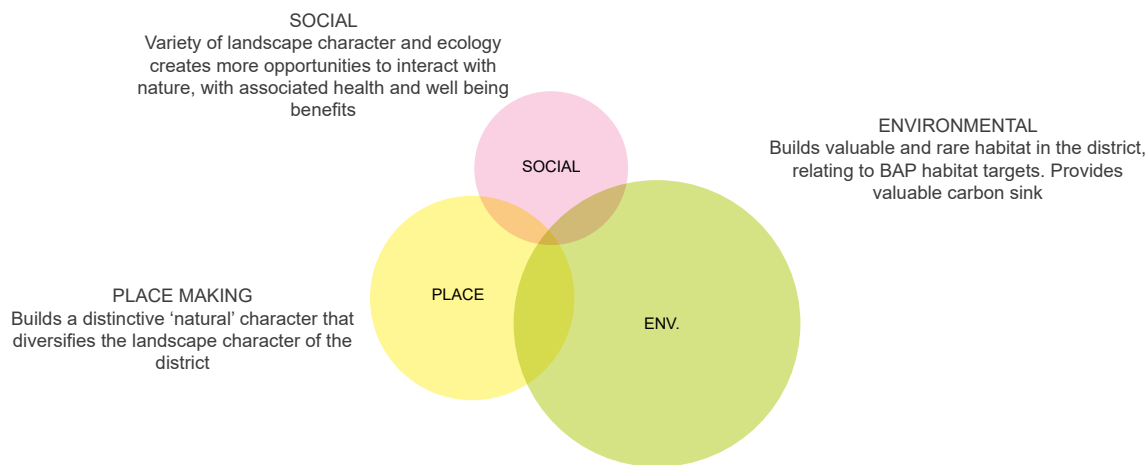
Approaches are needed which focus on revealing and connecting the District's natural open space network and engaging the public with it. These approaches will need to be delivered by taking a collaborative approach with landowners, applicants, arts organisations and land management teams.

The extension and connection of natural spaces makes a vital contribution to tackling the climate and biodiversity crises, whilst potentially forming a significant attractor to visitors - such as in the case of the Knepp Wildland Project in West Sussex.

Boosting biodiversity and re-wilding parts of the District (where it does not have negative consequences on important habitats and species) should happen at all scales, from local left-over greenspaces to district-wide projects and strategic development. Some of this can be achieved through our partnerships, such as with the Green Arc (One Partnership).

### Enhance

The enhancement of existing landscape features and identification of site-specific opportunities to create more varied and ecologically connected places and spaces is an important strand of this Strategy. An example of such an approach is through building wet woodland and other natural attenuation features in flood plains to increase their visual attractiveness and ecological diversity.



Wet woodland at West Wood, Little Sampford, Essex

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

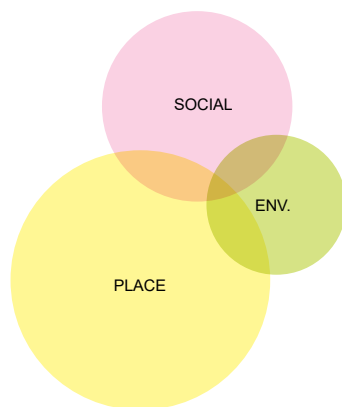
### Reveal – Through Management

Lifting canopies and clearing scrub on the edge of woodlands (where it would not cause harm to ecological or natural heritage designations) can create windows into their wooded interior. This reveals to people the exceptional landscape character that woodlands provide that might not be apparent to most. It can also help to overcome perceptions that such spaces are unsafe by making them feel more inviting and usable. Lifting canopies can also be beneficial to the health of trees and enhance the ecological condition of the woodland floor to support flora and fauna.

This will need to be approached in a sensitive, informed and carefully managed way to ensure that any removal of edge or understorey does not result in negative conservation outcomes. This is because scrub edges and scrub mosaics are also the most important areas for biodiversity. Ancient woodlands in particular need to be managed for their special features, distinctive sense of place and wildlife value.

#### SOCIAL

Being made aware of what is already there people are more likely to use spaces and interact with nature, with associated health and well being benefits



#### ENVIRONMENTAL

Canopy lifting should be done with biodiversity benefit in mind letting more light into the forest floor

#### PLACE MAKING

Crucially allows people to appreciate is already there



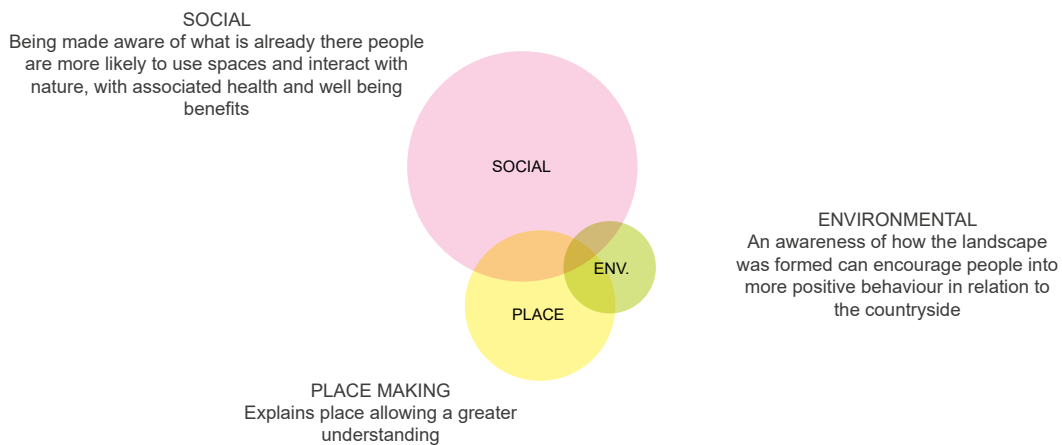
Managing woodland edges, The Wildlife Trust

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Reveal – Through Thoughtfully Designed Interpretation

Interpretation should be coordinated with a wayfinding package in order to identify existing or create new strategic routes that take in the best of the District as well as making provision for more locally focused opportunities.

How this interpretation is provided is an important part of any approach and will need to be designed to be sensitive to its environment so that it sits carefully within its landscape setting, intrigues visitors, encourages curiosity and informs them of what they are seeing or experiencing. Interpretation should appear as something that is incidental to its setting and not intrude on the natural character of the place. The use of digital technology such as mobile phone apps can also have an important role to play in the interpretation of large sites in particular.



Interactive interpretation posts installed by Forestry and Land Scotland

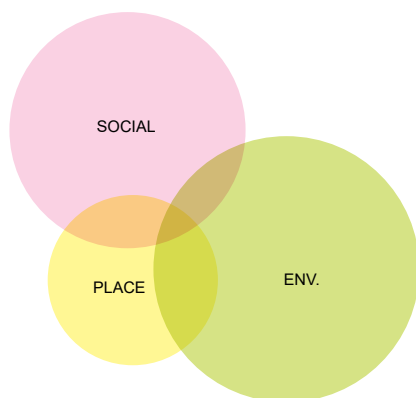


## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Engage – Through Management

Management of woodland can ensure large low branches are left to allow tree climbing where it does not cause damage to the trees in terms of their health or historic importance, whilst leaving fallen branches can provide opportunities for building dens. Overlapping natural assets and play can help to engage children and families with the natural world through play. Leaving old wood in place also creates new habitats for both flora and fauna.

**SOCIAL**  
Engages more children and families with the natural world and natural play with a myriad of health benefits



**PLACE MAKING**  
Builds character of the woodland

**ENVIRONMENTAL**  
Maintenance opens up the woodland floor creating more biodiverse habitat, leaving wood in place also creates habitat for invertebrates



Den building and natural play in woodlands

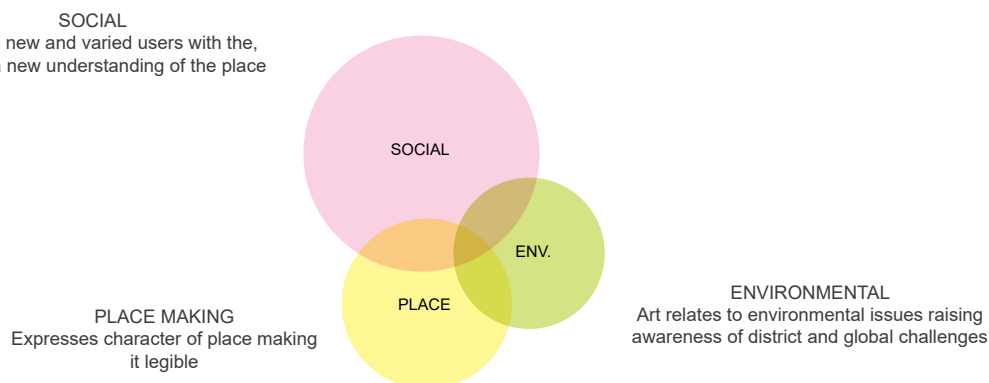
## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Engage – Through Curation Of Art And Sculpture

Art has the power to captivate and reveal landscapes, views and places that have previously been unnoticed or underused. A focus on the commissioning of quality art would build on and connect into Harlow’s exceptional sculpture collection, which includes works by Barbara Hepworth and Henry Moore.

It provides both visual interest and can make an outdoor space a destination in its own right. How such work is procured will be critical in ensuring that the right installation is commissioned for its intended location. Artwork can be temporary or permanent and can be varied in terms of its form. Installations which allow for temporary displays, for example, can add continued interest for more regular visitors. It can also support local educational art programmes and opportunities for local artists to showcase their talents.

The topography of the District provides real opportunities to use art to appreciate the wider landscape, including through locating artworks in places where longer distance views can be experienced. As part of GI provision such places are often free to access, allowing people to have their own experience of both the artwork and its setting. It can attract people into the countryside for the first time and well-placed art can expose people to exceptional views of their local and wider area in support of wider place-making objectives. An example of this is the Theydon Bois Earthwork.



The Hear Heres by Studio Weave, Derbyshire

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Parks

The [Council's Open Space Strategy 2017](#) (EB703) defines Public Parks and Gardens ('Public Parks') as including:

*'...urban parks, country parks and formal gardens. Usually include a wide range of activities, and may include other typologies (e.g. Provision for Children and Young People and Natural and Semi Natural Greenspaces). Very often includes formal elements of provision such as ornamental lawn, herbaceous border or rose garden.'*

The District has only very limited provision of Public Parks. Only two spaces in the District are categorised as 'Public Parks' in the Open Space Strategy 2017. These are Waltham Abbey Gardens and the Roding Valley Recreation Ground in Buckhurst Hill.

#### Considering The Role Of Urban Parks

As the District currently has so few parks, new development on the strategic sites identified in the emerging Local Plan can provide real opportunities to create open spaces which include an element of the attributes associated with Public Parks. This would support the ability for new spaces to act as both attractors for visitors and as social infrastructure which benefits both new and existing communities .

Through exceptional quality design, the design of large-scale open spaces should incorporate attributes of Public Parks and:

- Engage people with landscape, nature and healthy eating opportunities;
- Encourage spontaneous activity to get the inactive active;
- Encourage interaction between communities and community groups;
- Engage and be accessible to people of all ages; and
- Form part of the wider Green Infrastructure network, by building on local landscape character and ecology to create distinctive and ecologically valuable places.



Waltham Abbey Garden, Epping Forest District



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

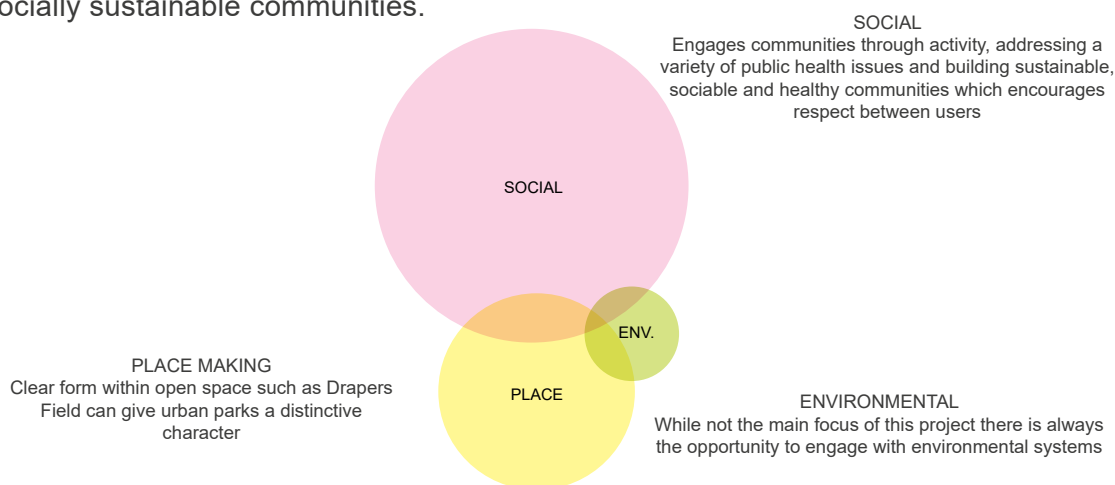
### How Do We Get There?

To deliver on these opportunities, large-scale open spaces should be designed in at the start of the masterplanning process, and form part of a coherent open space network which is closely related to other social infrastructure such as local centres, schools and community facilities. Initiatives which support access for all, such as dementia friendly spaces, should be incorporated. The design process should include specific workshops with community groups and the Council's officers.

### What Does Success Look Like?

An example of such an approach can be found at Drapers Field, in London Borough Waltham Forest, near the 2012 Olympics Athletes Village. Drapers Field was one of a series of Olympic fringe projects which aimed to further the Olympic legacy while providing space for new and existing communities to come together.

The project is included as it looks beyond the conventional approach to designing an urban park to address wider issues including community cohesion and wellbeing. Drapers Field achieved this through the creation of an undulating surface which is not fenced off or defined in terms of its use. Features such as concrete waves can be used as a play feature, a skate park or as seating. This encourages the surface to be shared with people sunbathe, run through the 'waves', skateboard, scoot, break dance and much more. This maximises its use and encourages positive engagement between different groups of people through activity, helping to build healthy and socially sustainable communities.



Drapers Field, Waltham Forest by Kinnear Landscape Architects

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Amenity Greenspace

The [Council's Open Space Strategy 2017](#) provides the following definition:

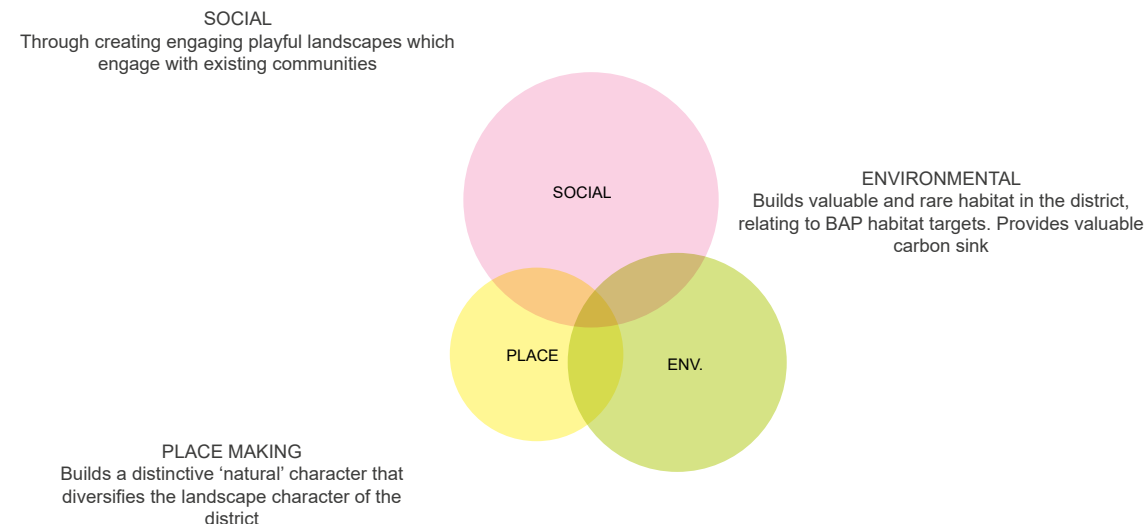
*'...informal recreation spaces (private or open to the public), roadside verges, greenspaces in and around housing and other premises e.g. hospitals, schools and colleges, industrial and business premises and village greens. May include other typologies, most frequently Provision for Children and Young People.'*

The Open Space Strategy 2017 indicates that the District has a good level of amenity greenspace. However, it tends to only provide areas of high-maintenance grass of average quality and function.

#### Considering The Role Of Amenity Greenspace

Amenity Greenspace should be viewed as an integral part of a development's open space offer, as well as forming part of a wider network of complementary open spaces that are attractive to communities, full of character, provide for more informal activities, and which enhance biodiversity.

Amenity greenspace is much more than finding a use for leftover pieces of land - designing space which considers the potential for incorporating overlapping functions such as food production, play and Sustainable Drainage Systems (SuDS) can deliver multiple benefits with relatively low capital and maintenance costs.



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### How Do We Get There?

Amenity greenspace should be designed in during the early stages of planning a development so that it contributes to the creation of a cohesive and coherent open space network which is integrated with other social infrastructure including local centres, schools and community facilities. The design process should include specific workshops focusing on amenity greenspace with community groups and Council officers. Within existing settlements initiatives to improve Amenity Greenspace should be community led and council supported, as set out in [Part 1 - Implementation: Enhancing our Existing Network](#).



Amenity greenspace at Centre Green, Epping



Normand Park, London by Kinnear Landscape Architects

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Allotments And The Productive Landscape

The [Council's Open Space Strategy 2017](#) (EB307) provides the following definition:

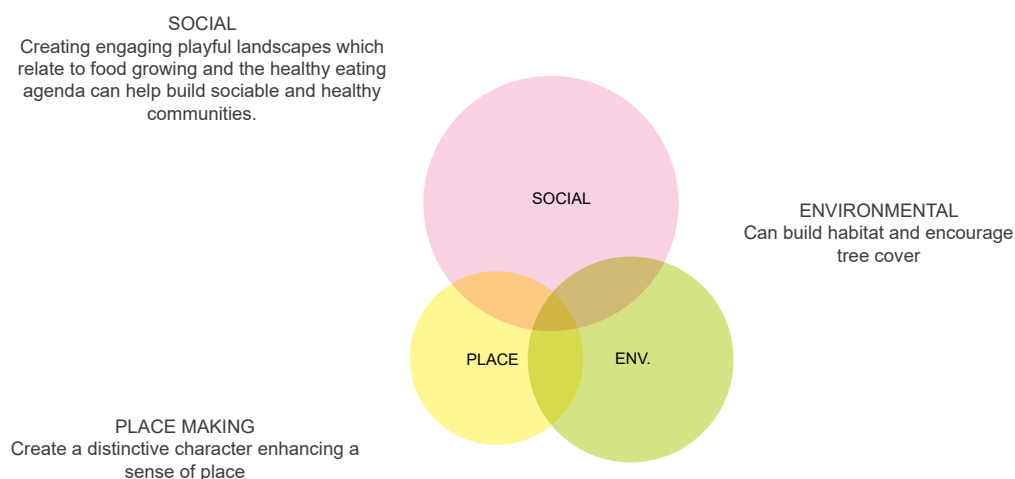
*'Allotments are generally for the growing of food crops. Community Gardens are generally more informal, and may include "garden" landscapes for outdoor relaxation.'*

This Strategy uses the term 'Productive Landscape' which incorporates Community Gardens. According to the Open Space Strategy 2017, there is a good level of allotment provision within the District. However, allotments have historically been designed so that they are inward looking, often due to their location on the fringes of urban areas or on back-land sites. As a result, they can often appear to be closed off from their immediate surroundings and not integrated with the local community.

#### Considering The Role Of Allotments

As well as providing healthy food, allotments support mental and physical well-being through establishing a connection to nature, providing outdoor exercise and encouraging social interaction with others.

There is the opportunity to expand the variety of productive landscapes beyond the provision of new allotments to widen people's engagement with local food production. This could be as simple as providing a public orchard with benches to encourage people to linger. Similarly, providing informal play equipment, interpretation pieces or art as part of outdoor growing spaces can help to introduce people to food growing. Opportunities for designing in productive landscapes at schools and as part of amenity greenspace supports this ambition and can provide climate change benefits through 'few miles travelled' for food.



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### How Do We Get There?

Food growing should be seen as an opportunity to engage people with the benefits that can stem from productive landscapes. Consideration should be given as to how food growing can be integrated into different types of open space such as amenity greenspace, streets and parks as well as within schools, other community facilities, and even within commercial developments. Food growing opportunities and the provision of new allotments should be considered from the first stages of the masterplanning and designing of new developments. Relevant community groups should be engaged in the process and careful consideration should be given to where initiatives should be located to avoid, for example, impacts from air pollution.



Lower Bury Lane Allotments (Tower Road end), Epping



A Variety of Cultures by Alec Findlay - ladders art installation for picking apples, pre-empting the orchard reaching maturity



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Provision For Children And Young People

The [Council's Open Space Strategy 2017](#) (EB703) defines 'Provision for Children and Young People' as including:

*'...play areas, areas for wheeled play, including skateboarding, outdoor kick about areas, and other less formal areas (e.g. 'hanging out' areas, teenage shelters). May include different aspects of play such as natural or "green" play, or "iplay" to incorporate information technology elements to stimulate greater usage.'*

The District's children and young people currently have very little high-quality space available to them. Any existing areas tend to be fenced off or isolated and play areas contain exclusively traditional equipment.

### Considering The Role Of Play

Integrating imaginative spaces for children and young people into development requires creative thinking as to how the role of play can be successfully provided. It is important to ask the following questions to inform the approach to designing in facilities for Children and Young People:

- Who is going to take part in play?
- What senses are engaged?
- How can it encourage greater activity and movement?
- How can it provide for a variety of ages?
- How can it engage with nature?

Alongside designated play areas, play should be considered as a theme that runs through the landscape and wider open space provision. This can be achieved in a number of ways. For example:

- Branches and logs can be left in woodland spaces as natural play and for den building.
- Playful art or sculptural play can help to bring amenity space to life and act as a draw to local residents and children.
- Safely incorporating Sustainable Drainage Systems (SuDS) as a play and educational element in outdoor spaces.
- Connections between places and spaces can also be enhanced by creating 'Play on the Way.'



Sound play at Elbe Waterfront Park by Rehwaldt LA



Sand play at Victoria Park by LDA design

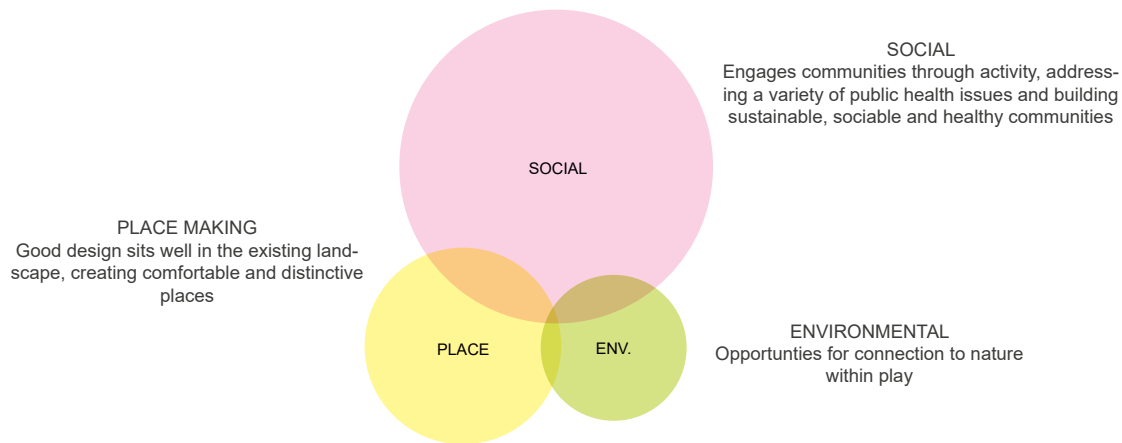
## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### How Do We Get There?

Diversifying the play offer across the District and moving away from the provision of traditional playgrounds requires spaces for children and young people to be designed by engaging and working with communities. This should be supported by using illustrations to show what collaborative, natural and intergenerational play looks like, right from the outset of the design and planning process.

### Youth Shelter And Sport

Safe and attractive spaces for young people are difficult to find in the District, and they are often not provided for in new development. MUF's work (below) demonstrates the value of combining space for young people to socialise with sport and encouraging young people to take part in activity. This approach is in contrast to the more traditional approach of providing an off the shelf 'Youth Shelter' which leaves young people feeling bored and disconnected.



The social MUGA by MUF Architecture and Art



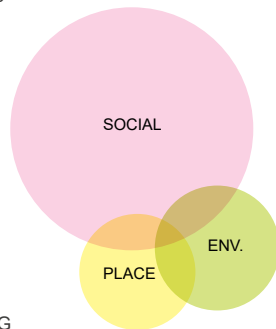
## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Play On The Way

Informal play can be incorporated in ways that go beyond the playground and is a way of encouraging activity in everyday life and in different places. This approach focuses primarily on building play into more traditional pedestrian environments. It has become a relatively well-known concept and has been termed 'play on the way.' It can be readily incorporated in schemes and encourage interaction with nature or other themes, such as healthy eating.

#### SOCIAL

Allows opportunities for play to be built into everyday lives and presents the opportunity to engage with nature and other beneficial themes such as food growing



ENVIRONMENTAL  
Engages young people with the environment

PLACE MAKING  
Engages young people with distinctive places



Informal play on the edge of Epping Forest



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Smaller Spaces

Smaller spaces have a meaningful role to play in the provision of Green Infrastructure, provide an 'everyday' accessible resource and add significant value to the quality of a place. When considered collectively these spaces provide a significant component of the District's Green Infrastructure assets, particularly in terms of the opportunities they provide for informal play and places to meet, net biodiversity and environmental gain.

As an example, a local greenspace could be improved through simple measures such as through the introduction of a relaxed mowing regime, using fewer herbicides, implementing plug planting to create biodiverse wildflower areas, forming a depression into the ground so that it can act as a swale or play feature; or simply by providing seating or introducing logs to act as an informal play opportunity. The importance of these more incidental spaces should not therefore be underestimated in terms of their local community value, including in providing local outdoor meeting places. Their value can also be enhanced by connecting them into the wider landscape-scale GI network. Where there are opportunities to do this, this should be enabled through good design.

Working with local people to identify opportunities for introducing these types of interventions, such as through the creation of a 'Pocket Park', can enhance a local area and can often be implemented in a cost- effective way but with significant social, visual and environmental benefits.

Similarly, at a District scale, underused and leftover spaces have the potential to contribute significantly more to the environmental and visual quality of the area than they currently do. This is explored in the Roadside Wildflowers and Community Greenspace Improvements projects in [Part 1: Enhancing Our Existing Network](#).



St Andrews, Bromley-by-Bow by Townshend Landscape Architects



Wildflower verges in North East Lincolnshire

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Movement

Designing in opportunities for walking, cycling and, where appropriate, horse riding at the outset will help to create the opportunity for more people to be able to move safely and easily throughout the District without need to use their cars. This is an important component of the development of the Strategic Masterplan Areas (See [Part 3](#)). This means helping people to:

- Easily and successfully find their destination;
- Understand where they are in relation to other key locations;
- Be able to readily orientate themselves in an appropriate direction with little misunderstanding or stress;
- Discover new places and services; and
- Feel safe

### Route hierarchy

Developing a route hierarchy and prioritising routes should be done as part of the development of Local Cycle and Walking Infrastructure Plans (LCWIP) or similar approaches. Considering access to nearby attractors and landscapes across the District and encouraging people to use them is a fundamental principle in the development of LCWIPs. Being able to get to a destination without the need to keep stopping and starting should also be a consideration in designing routes. Essex County Council's preference is that, where appropriate, provision should be through multi-user routes. These need to be well-designed to ensure that there are no conflicts between different users. Awareness of routes should be raised through local marketing and promotion.

### Accessibility and safety

Ease of access for all users should be considered across the network. For example, some routes cut across fields meaning that they are less accessible at certain times of year, whilst stiles and other obstacles along the network can limit the use by some people. Improvement of these routes should focus on accessibility for all. Connecting spaces through the use of 'Quietways' for cyclists and, where appropriate, horse-riders can encourage more people living in towns and villages to access Green Infrastructure beyond their immediate surroundings.



Accessible surfaces facilitate easy cycling as well as use by buggies and wheelchairs



Prominent entrances with a suite of signage can make routes clear and legible

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

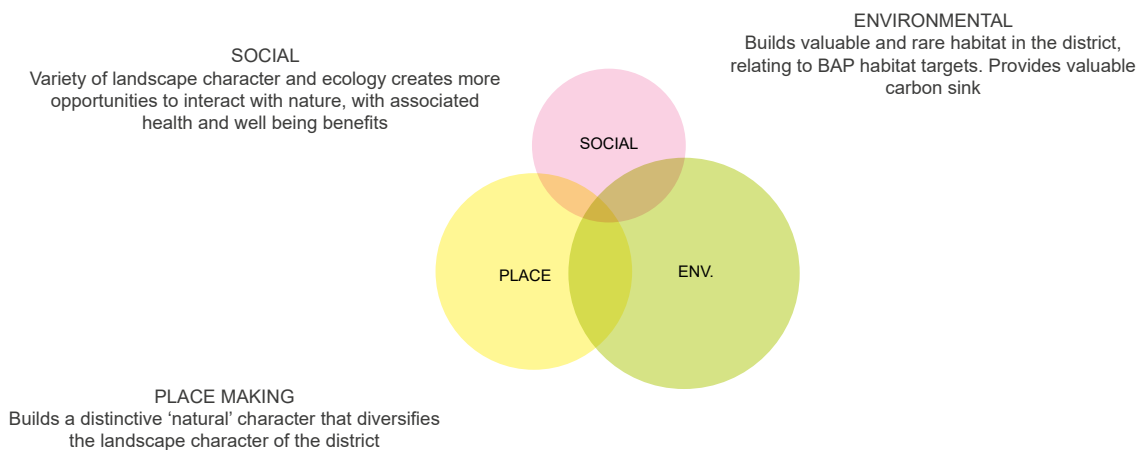
### Legibility

This can be viewed as how clear, without the use of signage, the route is. Legibility can be achieved by consistent surfacing, adopting a management regime that ensures routes are easy to use and by using a distinct landscape feature to signal the way such as lining routes with a distinctive tree species or opening up views at appropriate places along the route.

### Wayfinding and signage

A coherent set of wayfinding proposals should build on the inherent legibility of the route. This may be achieved through signage, such as finger posts and in-ground signage, or could be through landscape improvements to open up views so that people can better see where they are or improved information on routes including information on distances. Information should be presented in a consistent way that can be quickly read and understood. This should not result in visual clutter. Using digital technology, such as mobile phone apps, can help to achieve this and reflects the way that younger people in particular prefer to access information.

Routes should tie easily into new and existing communities giving easy access to both. Routes should be visible within settlements and should take advantage of any points of interest along their length. New and enhanced landscaping as part of a project can also add to the attractiveness of the route, as well as contribute to its ecological value. All of these approaches if taken forward in a comprehensive, area-based way support both recreational and commuter-based walking and cycle trips.





## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### The Water Environment

Taking a proactive approach to managing the water environment can have a number of significant benefits for the health and well-being for both people and the natural environment. The use of a multi-functional approach to the delivery of Sustainable Drainage Systems (SuDS), helps to manage flood risk, can provide interest as part of the design and provision of public open space, and increase biodiversity.

Essex County Council, as the Local Lead Flood Authority, has responsibility to reduce the impact and incidences of local flooding and has developed a [Local Flood Risk Management Strategy](#). As well as influencing new development and drainage by commenting on development proposals and through the development of a SuDS Design Guide, the Strategy includes a number of initiatives\*<sup>1</sup> which can be brought forward by working in partnership with communities, councils, and landowners.

There are also opportunities to work with landowners to encourage best practice in terms of land management to support biodiversity objectives ranging from changing management approaches to the banks of watercourses and the management of non-invasive species through to changes in land management practices to secure the reduction of ammonia in surface water runoff.



Ladywell Fields, Lewisham by BDP

\*<sup>1</sup> These include looking after watercourses and supporting the enhancement of Essex County Council's Flood Asset Register through to building new flood defences.

## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Sustainable Drainage Systems

Sustainable Drainage Systems (SuDS) are designed to manage stormwater as close to its source as possible, by mimicking natural drainage systems and processes to encourage infiltration, attenuation and passive treatment. SuDS are designed to both manage the flood and pollution risks from urban surface water runoff and to contribute to environmental and biodiversity enhancements and place-making. With this in mind, the multi-functionality and multiple benefits of SuDS provision should always be incorporated into development proposals and masterplans.

Good SuDS design should follow the SuDS philosophy, by adopting a number of key principles:

- A management train – using a variety of SuDS components in series
- Source control – managing runoff as close as possible to where it falls as rain
- Managing water on the surface – runoff should be managed through above ground features if possible and should mimic natural drainage processes
- Early and effective engagement – consider the use of SuDS at the earliest stages of the design process.



Grey to Green SuDS project, Sheffield by Nigel Dunnett



Ladywell Fields, Lewisham by BDP



## 2.2 DELIVERING MULTIFUNCTIONAL SPACES

### Benefits Of Suds

The benefits of SuDS include:

- Flood risk management – reducing the risk of flooding from development
- Water quality management – reducing the impact of diffuse pollution
- Improving amenity and biodiversity – the integration of Green Infrastructure with SuDS solutions can help to create new habitat, recreation and biodiversity areas
- Water resources – SuDS can help to recharge groundwater supplies and capture rainwater for re-use purposes
- Community benefits – attractive, well designed public open spaces that incorporate SuDS can help to create better communities through social cohesion and quality of life improvements
- Recreation – multi-purpose SuDS components not only manage surface water, but also act as sports/play areas
- Education – SuDS in schools provide a fantastic learning opportunity whilst also providing additional recreational space
- Enabling development – SuDS can help to free up capacity in already established drainage networks, and the provision of SuDS can often be a prerequisite of planning permission.

### How Do We Get There?

The main mechanism for securing SuDS is through the development process. Consequently, the consideration of SuDS as part of the early stages of designing a development or Masterplan will be key to its success and provides the opportunity to integrate measures as part of the multifunctional approach that this Strategy is seeking to achieve. The Council will also work with Essex County Council to identify opportunities for retrofitting SuDS.

