

GREEN INFRASTRUCTURE STRATEGY

IMPLEMENTATION: INFRASTRUCTURE ENHANCEMENT PROJECTS

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

Epping Forest District Council and their Partners
who are delivering Green Infrastructure
enhancements to the Buckhurst Hill, Loughton,
Debden and Theydon Bois areas.

4

CONTENTS

How To Use This Document	163
4.1 PROJECT 1: RODING VALLEY	165
Opportunities	167
Steps to Delivery	168
Funding	169
The Council's Infrastructure Delivery Plan (IDP)	169
4.2 PROJECT 2: LINKS TO THE THEYDON BOIS WOOD	170
Opportunities	173
4.3 COSTS	174
Project Development, Support and Awareness Raising Costs	175
Implementation and Maintenance Costs	175
Overall Costs and Cost Per Proposed Dwelling	176

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:

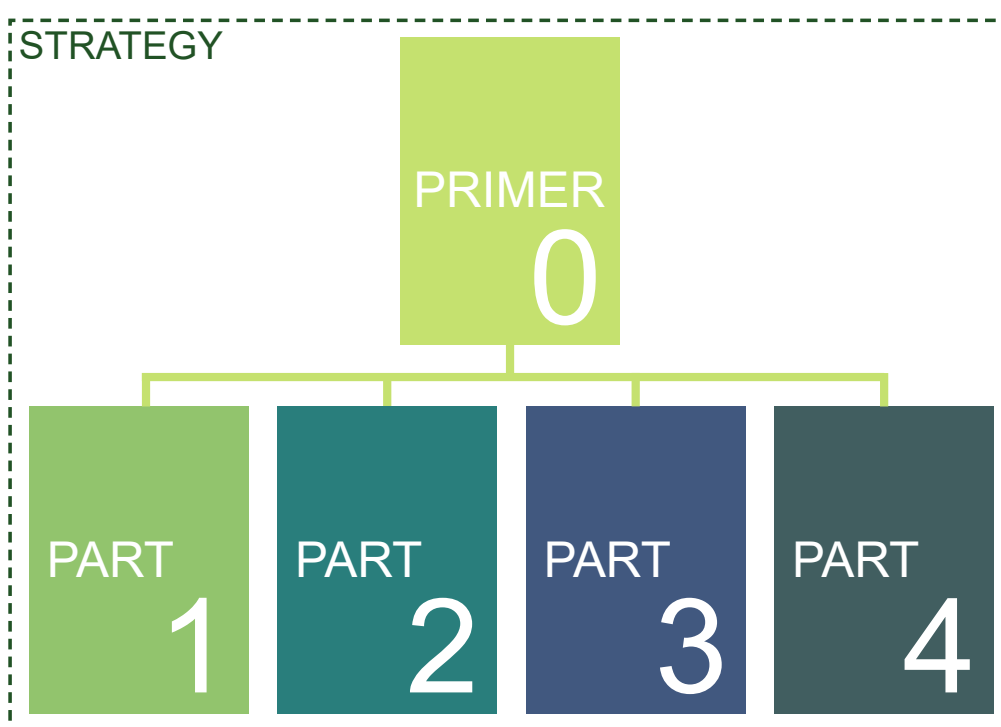
1. Implementation: Enhancing our Existing Network
2. Implementation: Landscape-Led Design
3. Implementation: Green Infrastructure in Strategic Allocations

This Part provides guidance on:

4. Implementation: Infrastructure Enhancement Projects

It provides:

- Specific infrastructure projects that are required to be delivered in order to avoid or mitigate an adverse effect on the integrity of the Epping Forest SAC



HOW TO USE THIS DOCUMENT

Who will use the Strategy and Part 4?

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 (4. Implementation: Infrastructure Enhancement Projects) identifies specific infrastructure projects that are required to be delivered in order to avoid an adverse effect on the integrity of the Epping Forest SAC. The projects relate specifically to development proposed in Debden, Theydon Bois, Loughton, and Buckhurst Hill and all new residential development will be required to make a financial contribution towards their delivery. These settlements have been identified for additional measures beyond payment of SAMM because all lie within easy walking distance of, and have direct access to, Epping Forest SAC by virtue of directly abutting the site. In contrast, none of the allocations at Chigwell, Epping or Waltham Abbey are within walking distance of the SAC except arguably South Epping Strategic Masterplan Area, which in any event is required to provide a bespoke SANG by virtue of its combination of size, proximity to the SAC and presence of a connecting footbridge over the M25.

The two Infrastructure Projects are intended as a minimum to address the recreational impact of the c. 300 dwellings expected at these settlements over the first five years of the Local Plan. As the infrastructure projects are developed, they may well be able to address all c. 600 dwellings allocated at these settlements. For example, if SANG were to be provided for these 300-600 dwellings it would require c. 6ha to c.11.5ha of SANG using the 8ha/1000 population metric. In other words, that is the amount of newly accessible natural greenspace required assuming it was currently entirely unused for recreation. The two Infrastructure Projects discussed below are already subject to recreational use but total more than 50ha (discounting the playing fields and cricket pitch). There should thus be ample capacity for these sites to accommodate the additional visitors from the allocated sites (which will represent just a 3% increase in total households in these settlements compared to the 19,472 existing households*1, assuming that all c.600 dwellings are occupied by people who don't currently live in these settlements), particularly since these projects are intended to increase their existing recreational capacity. This will be further investigated as each project is developed.

The two projects identified in this Part are intended as a starting point from which a broader list of Infrastructure Projects can be identified through the Local Plan Review process as necessary to ensure that development in these settlements can be addressed. It is therefore not envisaged that these two projects will be the only such projects to be brought forward over the plan period and the list of Infrastructure Projects will be kept live.

*1. Source 2011 Census: 1613 existing households in Theydon Bois ward, 1907 in Loughton Alderton ward, 1965 in Loughton Broadway, 1840 in Loughton Fairmead, 1795 in Loughton Forest, 1943 in Loughton Roding, 1773 in Loughton St Johns, 1742 in Loughton St Marys, 1985 in Buckhurst Hill East and 2909 in Buckhurst Hill West. Total of 19,472 households

PROJECT 1: RODING VALLEY

4.1

4.1 PROJECT 1: RODING VALLEY

The Roding Valley Recreation Ground project area collectively comprises over 50ha of land. The Recreation Ground is located between the built-up areas of Loughton and Buckhurst Hill and the River Roding. The Recreation Ground links into, and is contiguous with, the Roding Valley Nature Reserve to the north east.

The Recreation Ground currently used for a mix of organised sport and informal recreation. Specifically, it contains:

- Football: Adult, Junior and mini pitches
- Cricket: Two pitches – one to the northern end (Loughton Cricket Club) and one to the southern end (Roding Valley Cricket Club)
- Tennis: outdoor courts
- Two playgrounds and a Multi-Use Games Area.

Several Public Rights of Way and informal footpaths cross the site. Section 19 of the London Loop between Chingford and Chigwell crosses its southern end.

There are numerous connection points into the Recreation Ground from the residential areas to the west and Roding Lane to the south. Links across the Roding Valley Nature Reserve in the north east into the Recreation Ground can be achieved from Oakwood Hill and Chigwell Lane. There are also access points from the Project site into the Roding Valley Meadows on the eastern side of the River Roding. Part of the Roding Valley Meadows is designated as a Site of Special Scientific Interest and is also a Local Nature Reserve. Roding Valley Lake, located at the southern end of the area, is a key landscape feature and provides opportunities for fishing. Some areas are served by seating and bins and there is some signage.

The eastern boundary of the site is defined by the River Roding with views across it to the Roding Valley Meadows in many places.



Aerial view of Roding Valley Playing Fields in Loughton

4.1 PROJECT 1: RODING VALLEY

Opportunities

The area of the Project comprises both the Recreation Ground and the Roding Valley Nature Reserve to the north east which is contiguous with it. There are significant opportunities to enhance the visual amenity and biodiversity of the whole of the Project area through planting and other enhancements. This would provide opportunities to develop a more natural greenspace in places which would complement the setting of the Roding Valley Meadows.

The area comprising the Roding Valley Nature Reserve is designated as either an SSSI or a Local Nature Reserve. It has public access and has a number of footpaths running through it. Any improvements will therefore need to be carefully designed in order to avoid causing harm to its ecological value.

Enhancements across the Recreation Ground part of the Project site would help to create more visual interest, increase biodiversity and enhance its usability. This could be achieved without impacting on the formal sports pitches and would enhance their context – building on the ‘Best Kept Pitches in Essex’ award made to Loughton Town Council in 2018.



View over the Recreation Ground



Signpost within the Recreation Ground



Entrance from Oakwood Hill

4.1 PROJECT 1: RODING VALLEY

There are also opportunities to create more places to sit and dwell across the site including adjacent to the River Roding and the Roding Valley Lake as these are known to be key focal points which would be attractive for local residents to visit rather than the Epping Forest. In enhancing the site, care would be taken to ensure that it does not encourage greater use of the Roding Valley Meadows SSSI on the opposite bank of the river.

There is potential to build on the existing PRow network and informal paths and to enhance links with the London Loop and the PRow network beyond the site.

Taking these opportunities forward would provide for an enhanced amenity to support opportunities for new residents within these parishes to access natural greenspace as an alternative to the Epping Forest. There is also the potential, in places, to enhance cycling opportunities, as well as attractive areas for quiet contemplation and other opportunities for example for picnics and informal play for families.

Steps To Delivery

Development of Masterplan for the Project working with:

- Loughton Town Council,
- Buckhurst Hill Parish Council
- Essex Wildlife Trust
- EFDC Countrycare Team
- EFDC Grounds Maintenance Team
- Roding Valley Meadows Consultative and Management Groups
- Local Sports Clubs
- Local communities
- Access Forum
- Walking and Cycling Groups
- Essex County Council
- Environment Agency

This would be supported by a Wayfinding Strategy to identify locations for enhancing signage, and the enhancement of existing, and provision of new, links including access points. This will build on initiatives such as Loughton Town Council's 'Quietways' Initiative and the Buckhurst Hill Residents Society's Walks. It will also include the development of a comprehensive information resource for residents to be accessible via an 'app' (as suggested by ECC) and also in paper form.

EFDC will provide the officer support to develop the Masterplan and Wayfinding Strategy.

4.1 PROJECT 1: RODING VALLEY

Funding

Recognising that this project is aimed at relieving recreational pressure on the Epping Forest SAC arising from new residential development in the Loughton/ Debden/Buckhurst Hill/Theydon Bois areas then contributions will be sought from all new residential development where there is a net increase in units arising within these parishes.

The Council's Infrastructure Delivery Plan (IDP)

Currently, the IDP contains the following interventions related to Project 1:

- Upgrading of Roding Valley Recreation Ground (LOU 28)
- Enhanced signage at the seven natural and seminatural greenspace sites in Loughton, including Roding Valley Meadows (LOU 29)

The costs are noted as 'dependent upon exact size and nature of scheme.'



Roding Valley Lake

PROJECT 2:
LINKS TO THE
THEYDON BOIS
WOOD

4.2

4.2 PROJECT 2: LINKS TO THE THEYDON BOIS WOOD

The Woodland Trust acquired the land in 2006 as part of the 'Tree for All' project and planted with a mix of native broadleaf species between 2006 and 2009, helped by local community groups to create Theydon Bois Wood. Essex County Council paid for 30,000 trees, and the Buddhist religious order, Fo Guang Shan, paid for and planted 4,500 trees. In 2009, the Booker Prize judges planted an oak avenue. This planting symbolised the replenishment of trees that had been felled to produce the novels submitted for the prize. Local school children also planted a new orchard of 45 apple trees. The site is some 38.29 ha.

The mixed broadleaved trees of this young woodland are now establishing themselves and forming a bridge between the ancient and mature woods nearby. Animals and birds are moving in and the site also has wildflower meadows and a spectacular giant earth sculpture.

The land is gently sloping grade III agricultural land immediately west of the M11 near Theydon Bois. It is close to Epping Forest and it is believed may have once formed part of it. A small stream cuts through the site. The entrance to the site is on the Abridge Road, heading out of Theydon Bois just before the M11 motorway flyover and parts of the site are very visible from it. Public Rights of Way outside of the site provide links into it from both Theydon Bois and Debden. There is a good network of paths through the wood, including two linked public rights of way and a surfaced path. Part of the site has been kept free from planting in order to retain important views from the site across London.



Aerial view of The Woodland Trust Site in Theydon Bois

4.2 PROJECT 2: LINKS TO THE THEYDON BOIS WOOD

The Woodland Trust's guidelines for managing its sites including 'We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.' In line with this the site has open public access across it. This has meant that two previously unlinked PROW are now linked greatly improving the access opportunities for local people. A new surfaced path has been established through the site and links with a PRow through to Debden. There is no car park at the site for the public, but a hard-standing area is available for keyholders for use on events and is capable of accommodating coaches. The remote location of the site and the high risk of fly-tipping has meant that there are no plans to open up the parking area. The site is intended as a focus for quiet informal access for local people who can walk or cycle to the site.

Information on visiting Theydon Bois Wood can be found [here](#). The Management Plan 2017-2022 can be found [here](#).



Views to Central London across the site

4.2 PROJECT 2: LINKS TO THE THEYDON BOIS WOOD

Opportunities

The site provides a unique resource for local residents. The development of the site has linked two previously disconnected parts of the ProW network. However, the links from both Theydon Bois and Debden are, for the main part, of a poor quality and wayfinding and signage is poor. In order to provide for access to it to support its use as a natural green space the PProW network from both Theydon Bois and Debden into the site require enhancements in terms of surfacing, improving its accessibility for all and enhanced signage. Improvements of links within Debden itself to the site will also be explored.



PRoW access from Theydon Bois



PRoW access from Debden

COSTS

4.3

4.3 COSTS

The costs set out below have been developed as an indication of the range of improvements likely to be required to support the delivery of the Infrastructure Enhancement Projects. This has been developed following an analysis of the sites and infrastructure requirements to support enhanced connectivity. These costs will be reviewed following the development of the Masterplan and Wayfinding Strategy and will be updated at first review of the Strategy and incorporated into the next update of the Council's Infrastructure Delivery Plan. The costs below have been informed by work undertaken by LUC for the Conservators of Epping Forest in September 2020 and Spon's External Works and Landscape Price Book 2021. They are therefore considered to be up-to-date and appropriate for use to inform the costs of the implementation and maintenance costs set out in the table below.

Project Development, Support and Awareness Raising Costs

- Development of Masterplan for Roding Valley Recreation Ground (integrating with Roding Valley Meadows Nature Reserve): **£40,000**
- EFDC Staff costs for overseeing Masterplanning and implementation: **£26,000**
- Development of Wayfinding Strategy: **£10,000**
- Development of Awareness raising package (including mobile phone app): **£5,000**

Implementation and Maintenance Costs

Activity	Quantum	Initial Capital Cost	Maintenance Cost (25 years)
Footpath improvements (granular base, wooden edging, self-binding surface) 1.5m width	1800m	£81,000	£67,500
Footpath Improvements (loose surface path (e.g. woodchippings) 1.5m width	300m	£2,250	£2,850
Footpath Improvements (granular base, wooden edging, self-binding surface) 2m width	180m	£10,800	£9,000
Replacement bridges	2 x 5m span	£12,000	£12,500
Wayfinding/signage	37no. timber post signs/ finger posts	£12,765	£33,300
Seating	10no.	£18,500	£12,500
Litter/dog bins	10no.	£4,000	£10,000
Wooden interpretation signs	5no.	£1,250	£4,500
Replacement stiles	2no.	£1,000	£2,500
Specimen Tree Planting	500 sqm	£45,000	£0
Whip Planting	1000 sqm	£4,700	£0
Total		£193,265	£154,650

4.3 COSTS

Overall Costs and Cost Per Proposed Dwelling

Overall costs: £428,915

Cost per dwelling based on 599 dwellings proposed for allocation in the emerging Local Plan within the parishes of Loughton, Buckhurst Hill and Theydon Bois. Therefore, it is calculated as **£716** per dwelling.

