

# 03 SITE CONTEXT

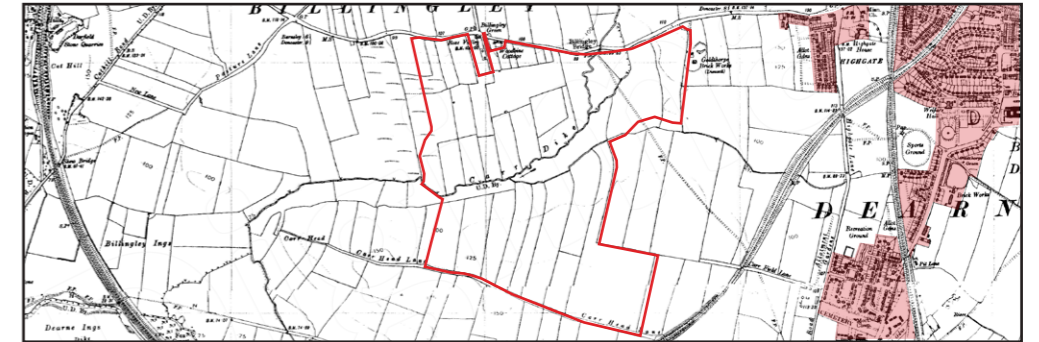
## 03.7 CONSERVATION AND HERITAGE

The Billingley Conservation Area sits to the North of the site which includes three Grade II listed buildings within the village: Billingley Hall, Poplar Farmhouse and Manor House. The proximity of the site to the conservation area and its impact on the character and setting of the listed buildings was assessed as part of the Local Plan process during which the Local Plan Inspector concluded that the impact was acceptable.

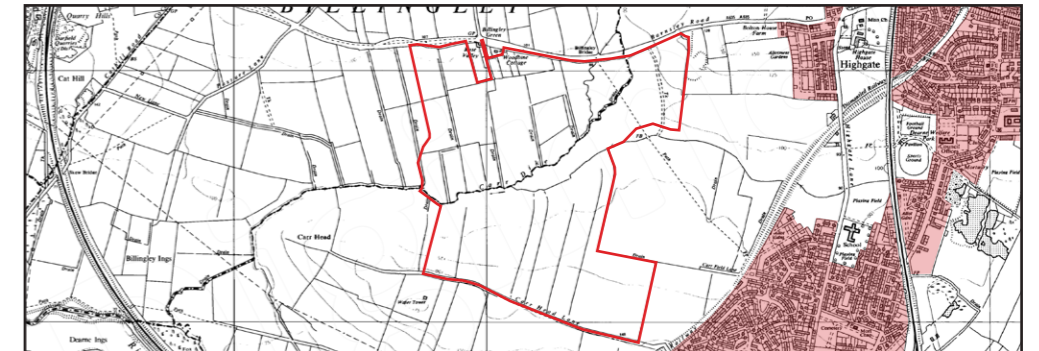
The below historical maps illustrate the urban expansion of the surrounding context, which has predominantly occurred to the East and South-East of the site. These areas include more modern buildings which buffer the site from the original settlement of Bolton upon Dearne. It is also clear that the Goldthorpe Industrial Estate has been expanding since the 1980s.



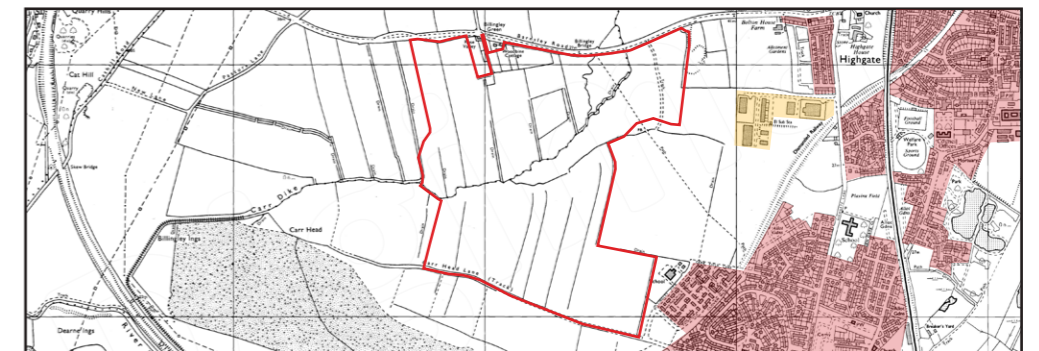
View towards site from edge of Conservation Area (LVIA Viewpoint 12)



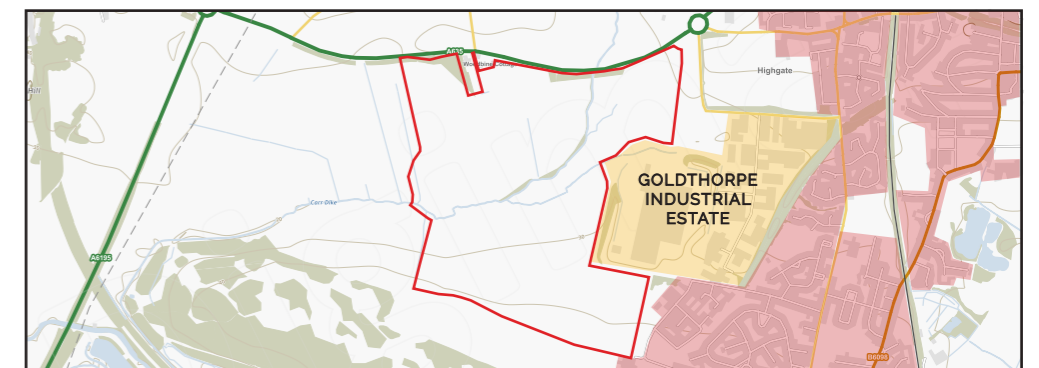
Historical Map 1 | 1930s



Historical Map 2 | 1960s



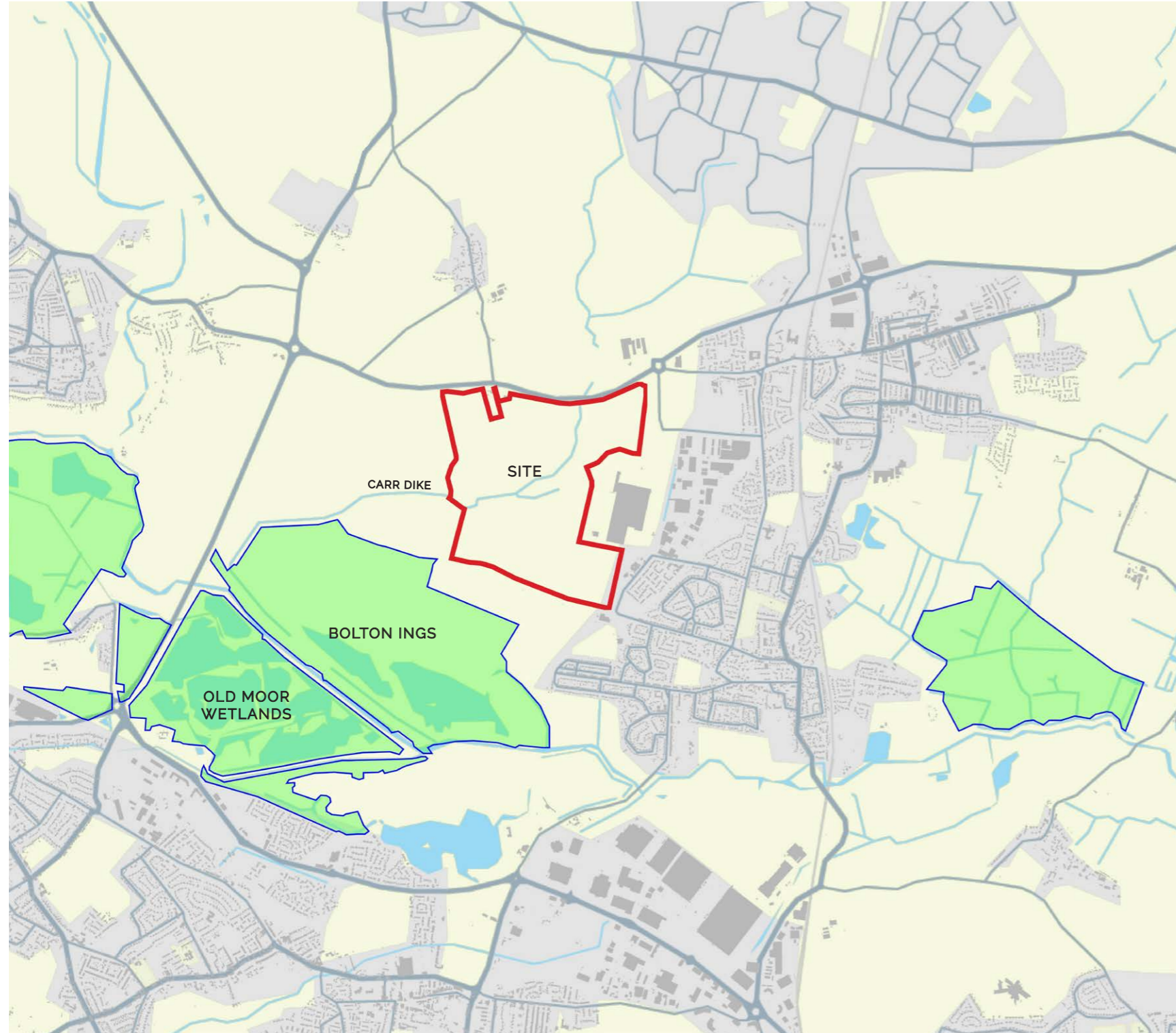
Historical Map 3 | 1980s



Historical Map 4 | 2010s

# 03 SITE CONTEXT

## 03.8 ECOLOGY



The site is located approximately 550m North of Bolton Ings and 1km North of Old Moor wetlands, both of which are included in the RSPBs Dearne Valley reserves.

The Dearne Valley supports breeding birds of lowland damp grassland, lowland open water and their margins and scrub. Carr Dike acts as a hydrologic and terrestrial habitat connectivity between the site and the wetlands.

The Barnsley Local Plan included collaboration from the RSPB, Natural England, and the Environmental Agency to understand the sensitivities of the site, of which the Council was able to satisfy that the site is suitable for development. In 2021, Natural England notified that the land to the South of the site including Bolton Ings, Old Moor, and Bolton Tip as a proposed Site of Special Scientific Interest (SSSI). Natural England has confirmed that the development is not prohibited subject to satisfactory mitigation proposals.

The site falls within the Dearne Valley Green Heart Nature Improvement Area. A partnership was formed for the Nature Improvement Area (NIA) with the overall aim of restoring and enhancing the ecological networks of the river, its floodplain, and its link to the link to habitats within its surrounding context.

Within the site sits Carr Dike which enters the site from the Northern boundary and exits on the Western boundary. Bordering Carr Dike is broadened semi-natural woodland, plantation woodland and sections of species poor grassland.

Barnsley Council's Biodiversity and Geodiversity Supplementary Planning Document specifies within the NIA, specific biodiversity enhancements over and above the minimum mitigation/compensation measures are required. The proposed scheme is expected to incorporate full site biodiversity measures including comprehensive sustainable drainage systems and landscape scheme.

The proposal will look to retain as many areas of significant ecological value as possible, but in some instances this may not be possible, thus additional ecological mitigation will be required. The mitigation measures are to achieve a biodiversity net gain of at least 10%.



Satellite Image of Immediate Context

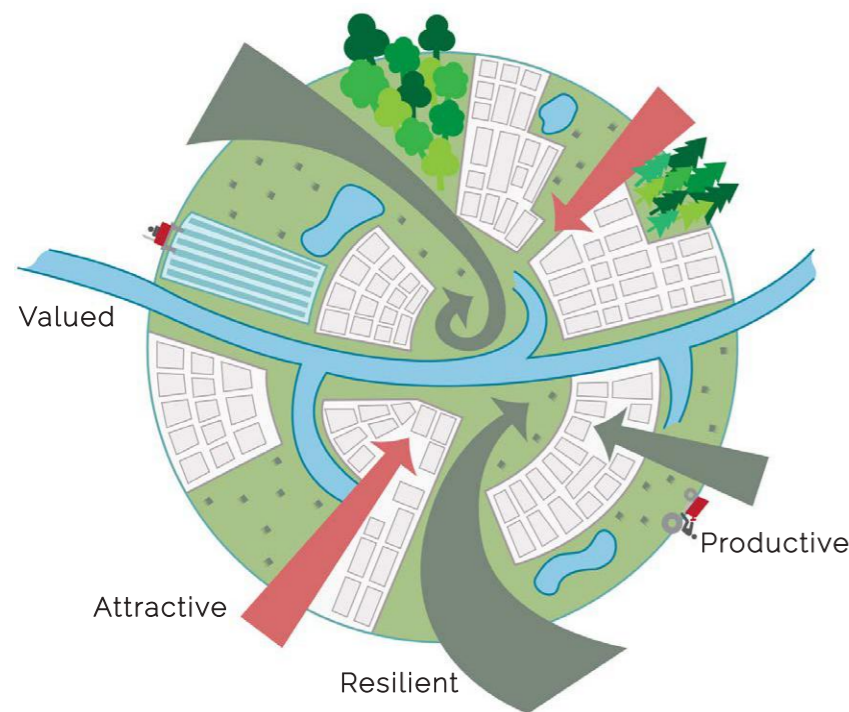
# 03 SITE CONTEXT

## 03.9 GREEN INFRASTRUCTURE

The Council recognises the major contribution that the natural environment will make in realising economic ambitions. With the impacts of climate change combined with the decline of traditional industries and the associated economic, social and environmental consequences, there has been stronger focus directed towards how we protect and preserve our natural environment.

Green infrastructure is seen as a critical component to new development; new assets that create economic, social and environmental value together with helping to reduce the long-term costs to the borough of responding to climate change.

Particular emphasis is placed on green infrastructure which radiates in to towns and cities. This vision envisages cities and towns with green infrastructure links in the form of green lungs/wedges such as transport corridors (for example tree lined avenues and arterial routes) across South Yorkshire and beyond. This could involve improving transport routes and green infrastructure investments to key gateways. Green infrastructure nodes could be developed, linking different assets. Public realm improvements could be sought to improve linkages to outer ring roads.



Strategy Vision: A vision of a multi-functional green network for South Yorkshire

The Local Authority set out four strategic objectives:

### Objective 1: To accelerate sustainable economic growth

- By increasing the attractiveness of brownfield and employment sites for commercial investment either as new build or estate refurbishment
- Increasing and sustaining a high quality employment offer with a series of on-site open spaces, water bodies, footpaths and landscaping as appropriate
- Creating new parks, open spaces and landscaping to increase the attractiveness of new housing and employment land for investment
- Enhancing the appearance of the public transport hubs and services to promote walking and cycling as journeys to work
- Stimulating investment by creating attractive environments and improving image
- Promoting nature and activity-based tourism
- Encouraging better use of the River Dearne, Don and Dove

### Objective 2: To adapt to and mitigate climate change by:

- Using woodlands and peat to increase the Borough's natural carbon storage capacity
- Increasing tree canopy cover on streets and in the public realm-to provide more shade, moderate urban temperatures and reduce surface water run-off
- Maintaining, and where possible increasing, the amount of vegetation cover in urban areas to reduce surface water run-off and increase the cooling effect-e.g. favouring green roofs and green walls in new and refurbished buildings, minimising the use of non-porous surfacing in the public realm and in garden materials and when existing buildings are refurbished
- Creating more areas of open water and water features to increase cooling.
- Increasing the use of Sustainable Drainage Systems (SUDS) to provide storm water attenuation and reduce flood risk.
- Identifying opportunities to undertake river restoration projects, reinstating natural flood plains to create wetlands and flood storage areas.

- Reducing carbon emissions by encouraging people to make local journeys by cycle and or on foot.

- Adopting measures which enable wildlife and habitats to adapt to climate change and maintain biodiversity.

### Objective 3: To improve access, movement and connectivity with sustainable travel and secure healthy communities and well-being by:

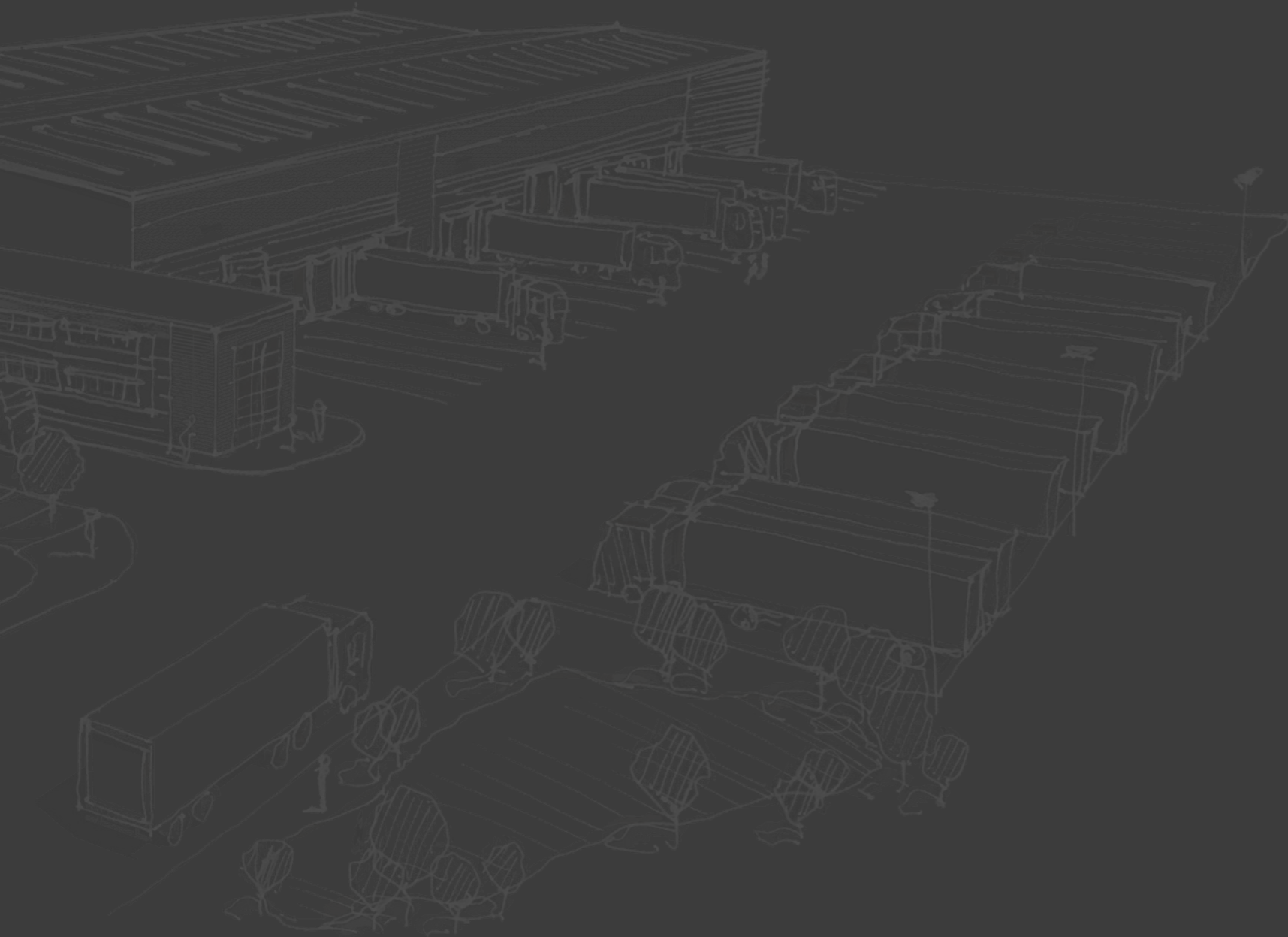
- Increasing the quality and accessibility of natural green space, walkways and cycleways
- Increasing the use of natural green space, walkways, and cycleways
- Providing spaces for play, sport and relaxation – promoting physical and mental health and well-being.
- Fostering links between sites such as parks to create continuous green routes within and between communities
- Making use of natural features such as the rivers to create visual gateways on the strategic transport network

### Objective 4: To protect and improve countryside and natural environment by:

- Increasing the areas of high biodiversity value
- Developing a network of multi-functional green spaces
- Conserving and enhancing the priority species and habitats identified in the Biodiversity Action Plan.
- Reducing habitat fragmentation through the creation, extension and restoration of priority wildlife habitats.
- Further enhancing the Borough's designated wildlife and geodiversity sites and ensure all 'Local Wildlife Sites' are in positive management.
- Maintaining and improving the condition of water bodies across the Borough.
- Increasing the use of SUDS drainage techniques to enhance water policy.

# 04 CONCEPT DESIGN

- 04.1 Key Design Principles
- 04.2 Masterplan Layout Principles
- 04.3 Schematic Design Code Principles Diagram
- 04.4 Design Code



# 04 CONCEPT DESIGN



Deliver a high quality development that is responsive to the sites constraints, setting and function.



Create a park that engages with the workforce, as well as the local population, to promote a community atmosphere.



Consider the built form, landscape and communal spaces to ensure a high quality, holistic approach.



Utilise modern design methods and materials, to ensure the best possible outcomes for energy use, carbon footprint and wellness.

## 04.1 KEY DESIGN PRINCIPLES

Taking into account the requirements of the brief and combining with an understanding of the site constraints and opportunities, allows a number of key principles to be established, as follows:



### Design & Character

To create an attractive, self-contained and functional development with clear identity, which relates well within its context. Buildings should be well-designed, with attention to detail and provide clear legibility in the choice of façade material specifications.



### Functionality

To provide a development that will meet the long-term needs of occupiers for running an efficient and successful business. Clear thought must be given to optimise functionality and avoid unnecessary routes of travel.



### Protect Key Viewpoints

To design the building form and elevation treatment taking into account key viewpoints and context of the development. Views may be mitigated with appropriate use of screen bunding and landscaping and where this can't be achieved the architecture of the buildings should address best practice to reduce visual impact.



### Orientation & Movement

To ensure that the development provides a sense of arrival for visitors arriving by vehicle or on foot. Routes for HGVs, cars, cyclists and pedestrians should be clearly segregated to avoid potential conflicts. Clarity of design and layout should be at the forefront, with signage being a fallback.



### Quality of Public Realm

To create a development which enhances the quality of public realm. Amenity should be provided for the use of all users to create a positive work environment for the area and within public areas of the development. New footpaths should link into the wider existing network, increasing amenity and connectivity.

## 04.2 MASTERPLAN LAYOUT PRINCIPLES

In order to develop the masterplan and parameters layout, it was necessary to use the briefing requirements alongside the information gathered from analysis of the site. A number of key aspects have been identified in order to lay out the development:



### New Access Roundabout

The principal highway access into the development needs to be from the A635. A new roundabout is under construction which will provide suitable access to the site.



### Access for Pedestrians & Cyclists

Access for pedestrians and cycles needs to be established and connectivity enabled from the existing offsite infrastructure. Ideally this would be central to the site and provide connectivity between the site and access roads via the new access roundabout.



### Configuration of Development Plots

A configuration of 4 development plots each having the ability to cater for varying unit footprints was considered the optimum arrangement in order to offer the required flexibility of floorspace to potential end users and future reserved matters applications. The plots should be configured to provide a centralised spine road allowing access to each of the development plots.

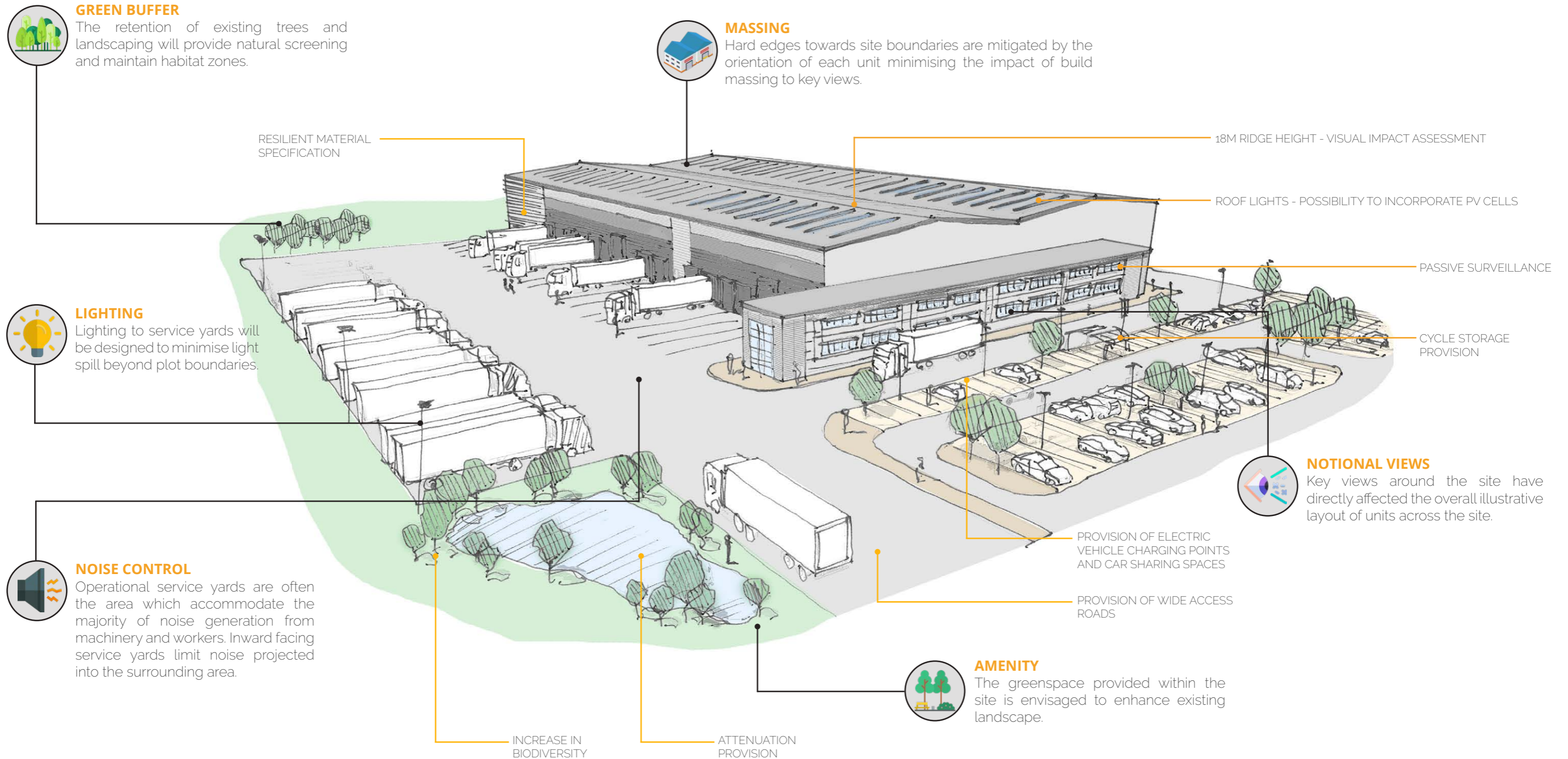


### Peripheral mounding and soft landscaping

New earthworks mounding will be formed along peripheral boundaries, which will assist in mitigating both visual and noise impacts. Significant new landscape will be planted where required, which will enhance and soften the bunding, offering screening with varied heights and densities as well as create ecological habitats and deliver biodiversity net gain on site.

# 04 CONCEPT DESIGN

## 04.3 SCHEMATIC DESIGN CODE PRINCIPLES DIAGRAM



Key Principles Diagram

# 04 CONCEPT DESIGN

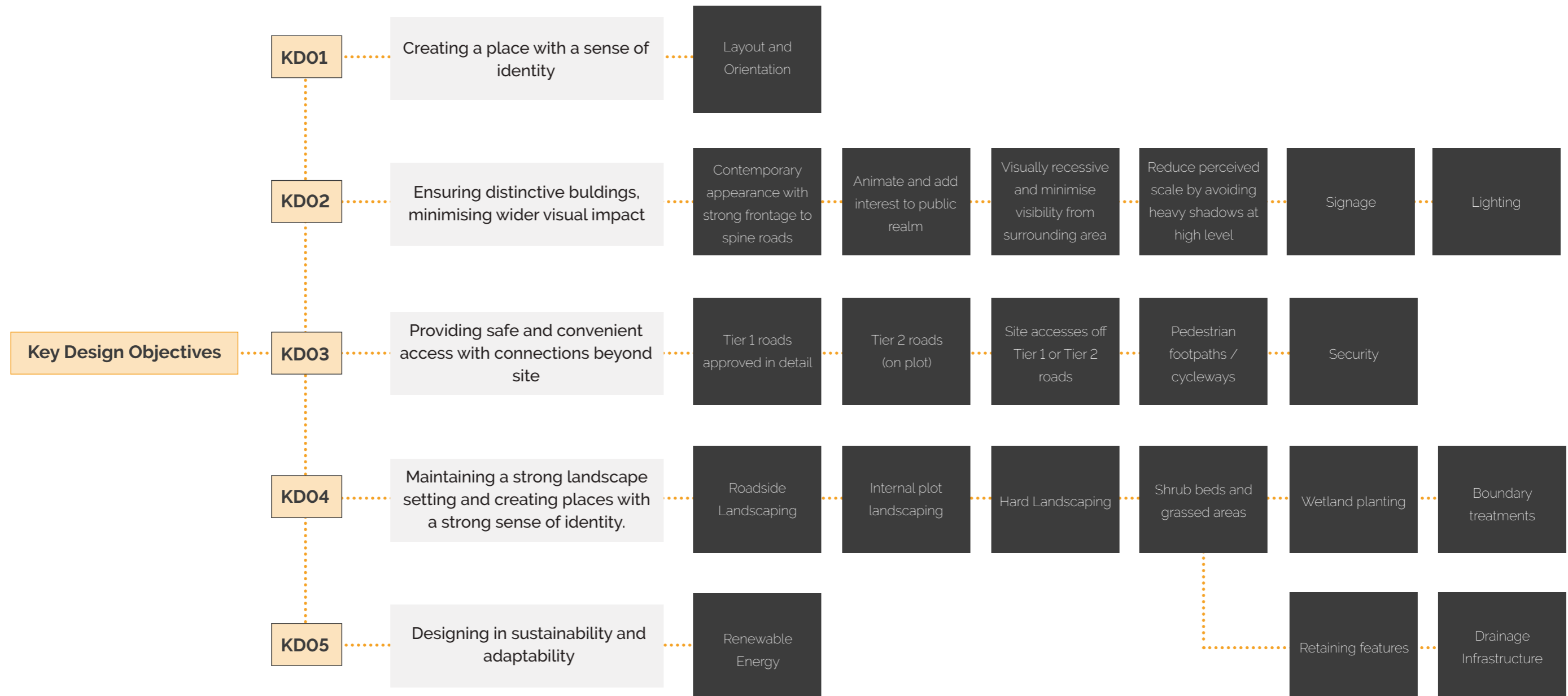
## 04.4 DESIGN CODE

These key design objectives form the Design Code which will apply to the proposed development. The purpose of the Design Code is to set a framework for the design of all future on-plot developments across the site and for consideration of that design at reserved matters stage by the local planning authority. It will:

- Set out the long term commitment to high quality design from the outset – for buildings, infrastructure and landscaping on plot.

- Enable a cohesive approach to design across the site, building on the detailed design of the initial infrastructure and strategic landscaping, and the approved outline parameters for the development plots.

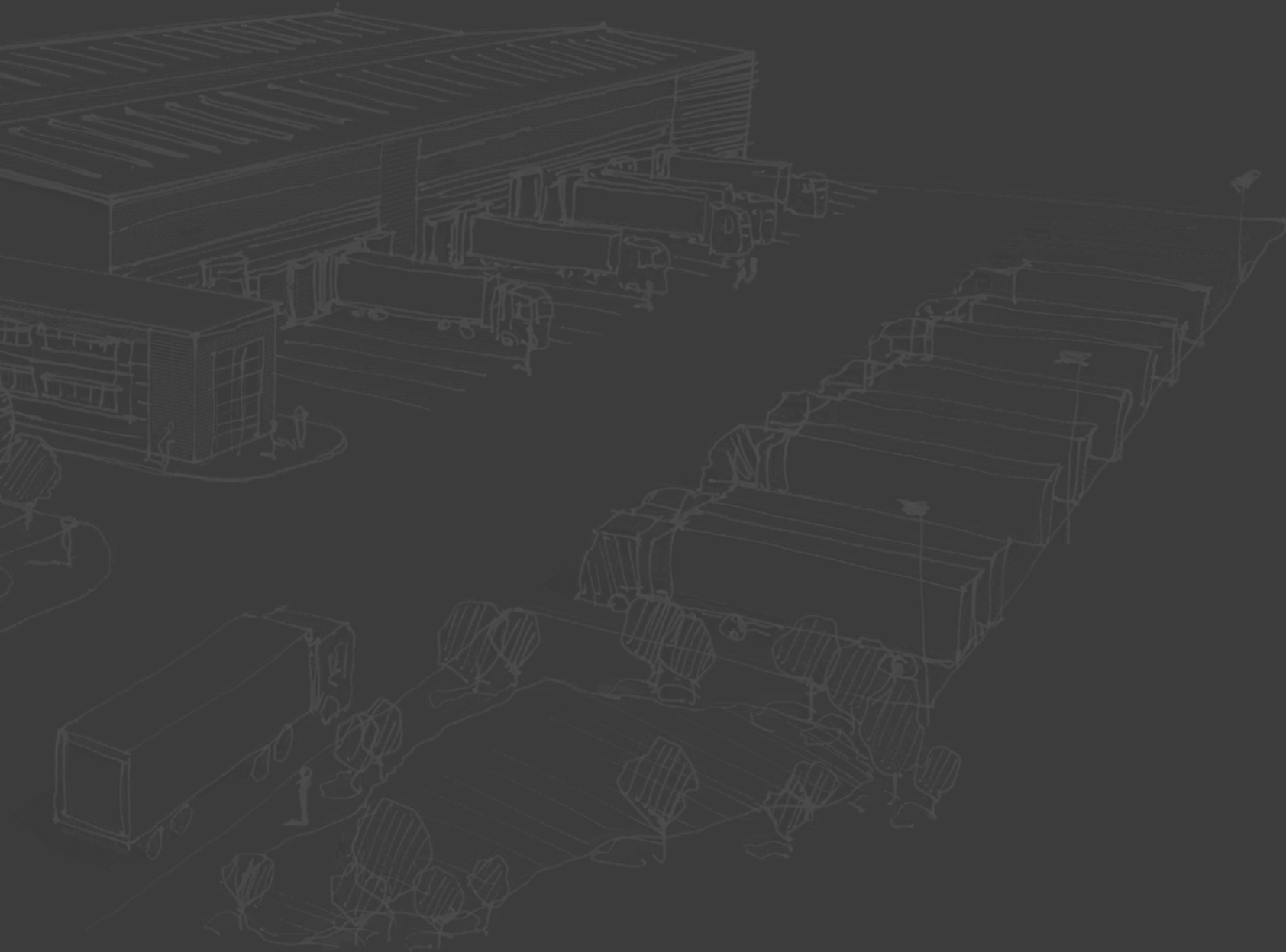
- Allow for a more streamlined process at the reserved matters approval stage.



Design Guide Hierarchy of Elements

# 05 DESIGN EVOLUTION

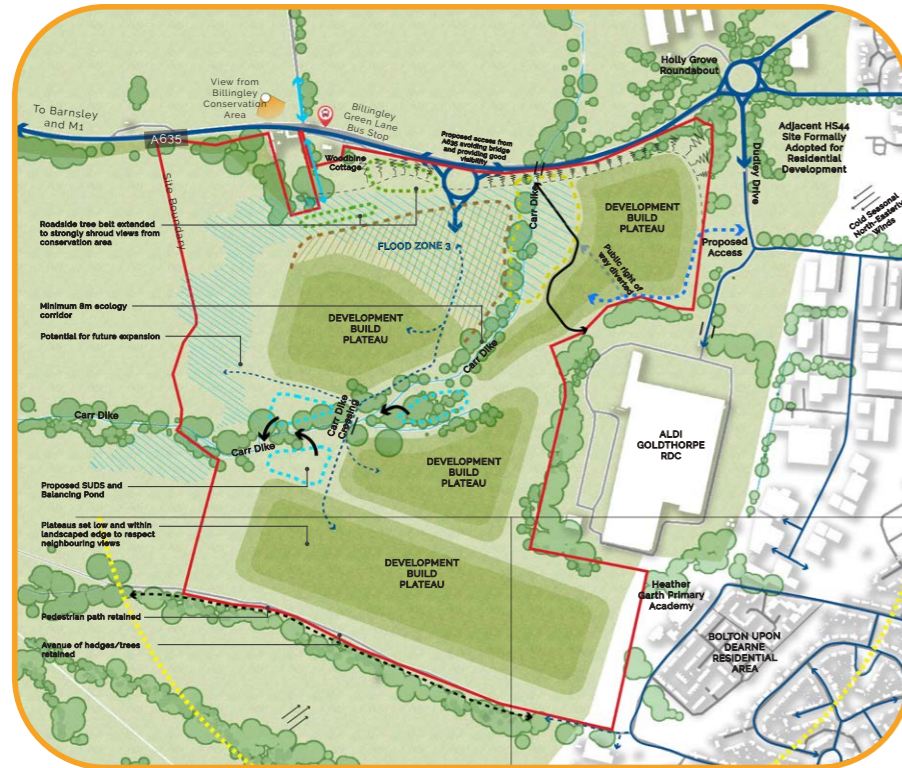
- 05.1 Timeline
- 05.2 Phasing Strategy
- 05.3 Development Plots / Parameters Plan
- 05.4 Design Analysis Summary
- 05.5 Masterplan Concept Development
- 05.6 Elevation / Roof Concept Development
- 05.7 Case Study Concept Development
- 05.8 Elevational Configuration
- 05.9 Masterplan Compliance Assessment
- 05.10 Design Panel Review
- 05.11 Fire Statement



# 05 DESIGN EVOLUTION

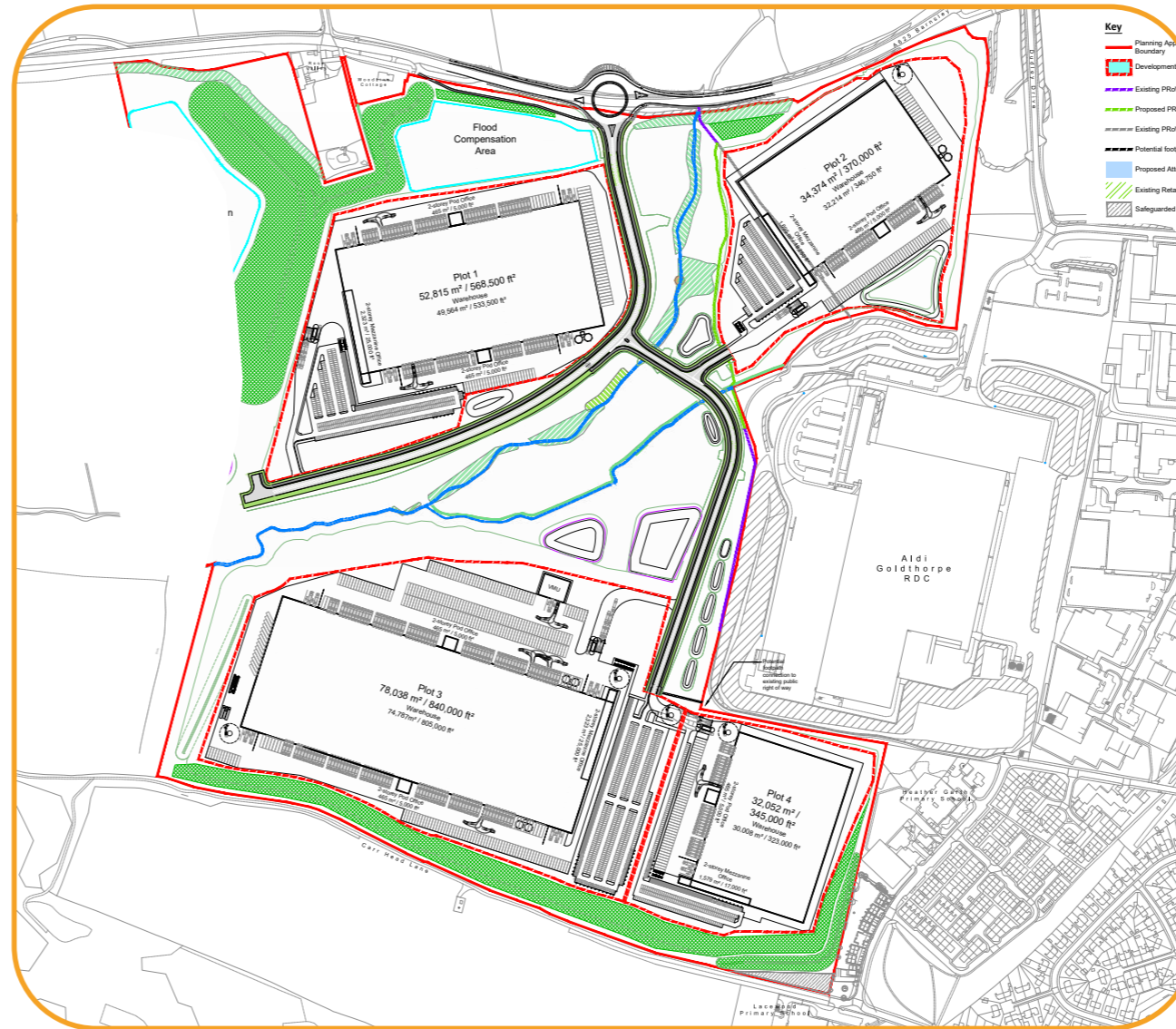
## 05.1 TIMELINE

CONCEPT DEVELOPMENT COMMENCES 2022



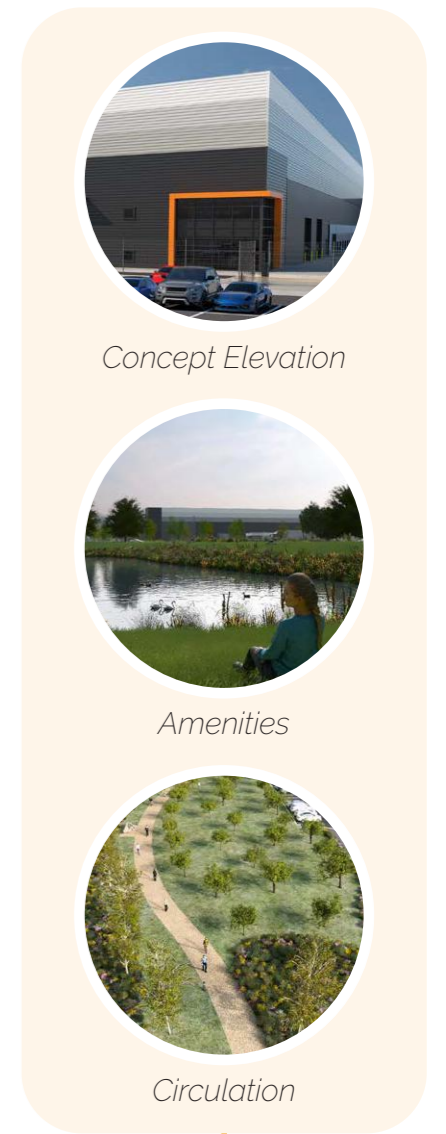
### SITE ANALYSIS & STRATEGIC MASTERPLAN

Establishing site constraints and opportunities. Determining principle transport corridors, development areas & landscape zones. Designing in accordance with the Council's approved Masterplan Framework.



### SKETCH MASTERPLAN

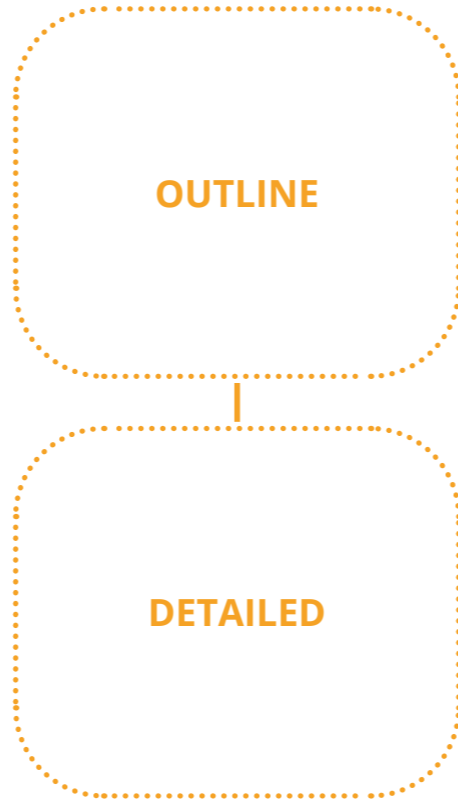
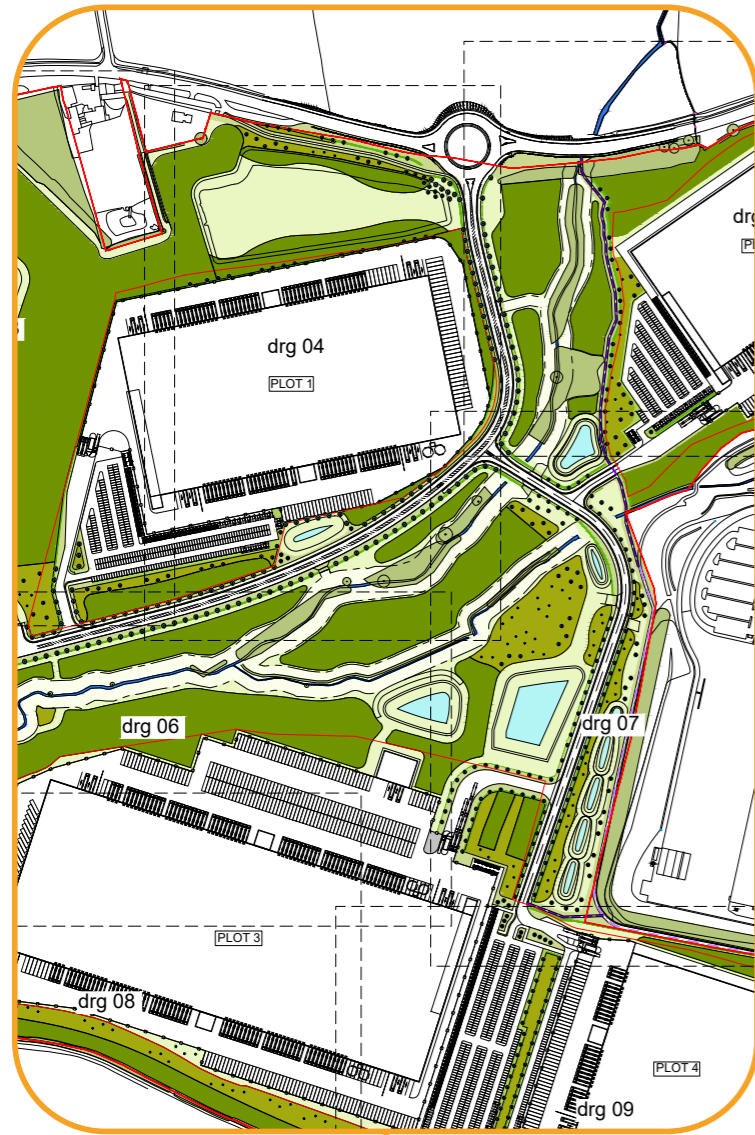
Development of plateaus established within principle road and footpath network corridors identified for blue and green infrastructure. Plot options are explored conceptually.



### CONCEPT DESIGN DEVELOPMENT

Develop conceptual design in collaboration between architectural engineering and landscape disciplines.

# 05 DESIGN EVOLUTION



## LANDSCAPING STRATEGY

Green & blue infrastructure developed with defined visual impact analysis, noise mitigation, movement & amenity. Planting strategies are confirmed.

## HYBRID APPLICATION

Application material is developed in detail with technical considerations concluded on road design footpath arrangements & infrastructure attenuation strategy.

## MASTERPLAN OPTIONS

Within committed designs for the infrastructure, a proposed illustrative masterplan is developed for the on-plot arrangement of buildings service yards and car parks which is used as the basis for the public consultation engagement.

PRESENT