

The NEC Masterplan

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Consultation Draft



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Foreword

Now is the time to be bold and ambitious about the future to drive investment and prosperity in the region.

For the West Midlands this revival can harness the benefits of our young, diverse, and entrepreneurial population.

The arrival of the national High Speed 2 rail network will be a major catalyst for growth. Immediately adjacent and directly connected to the NEC site will be the first station outside of London, providing 38 minute journey times to the capital. This connectivity will radically enhance access and further stimulate development investment in the area.

As an established destination for events, exhibitions and leisure the NEC is positioned as part of the UK Central Solihull Hub Area. The Hub is recognised as a major engine of economic growth in the UK and one of the best connected development zones in Europe.

The NEC site will play a significant role in future economic growth in the region.

Our vision is to realise the development potential at the NEC site. The launch of the nec.city Masterplan in 2018 set out the scale of the opportunity. Over the past 12 months we have been evolving these plans in response to changing market demands.

The new Masterplan sets out a bold plan for future development to create a truly unique environment to work, rest, live and play. It defines the scale of the opportunity and demonstrates how new residential, commercial, leisure and community space alongside the supporting amenities and public realm can be delivered. This scale of development will meet the needs of the region's growing population and enterprising businesses.

With the site's unique landscape of mature trees, hedgerows, ponds and the Bickenhill Plantation new development can form a distinctive, green and nature rich environment.

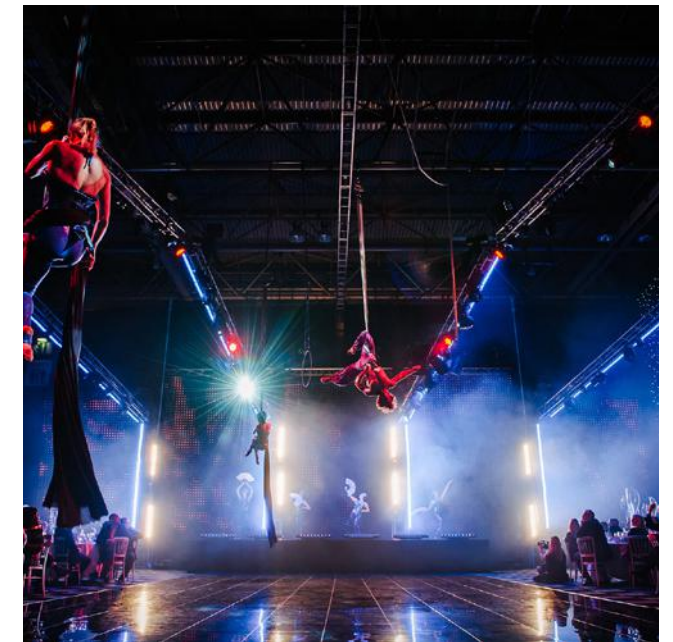
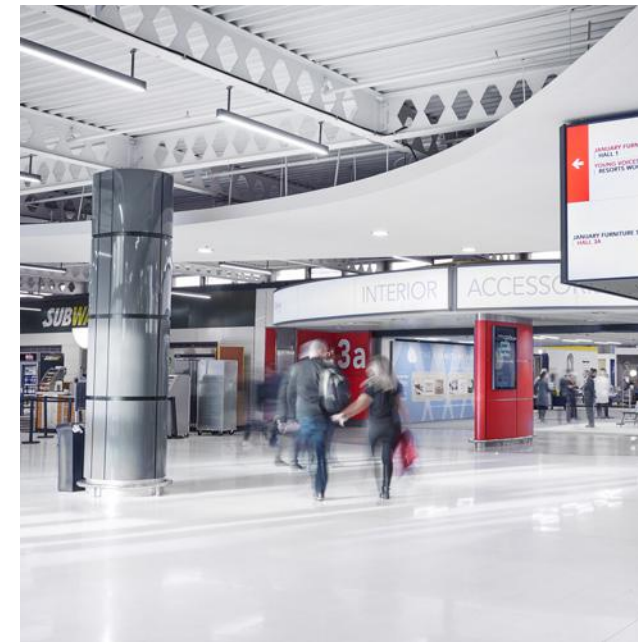
It will promote health and wellbeing and contribute positively to sustainability objectives including enhancing the natural environment and meeting the climate change challenge.

The NEC Group is committed to realising the exciting development potential of the NEC site.

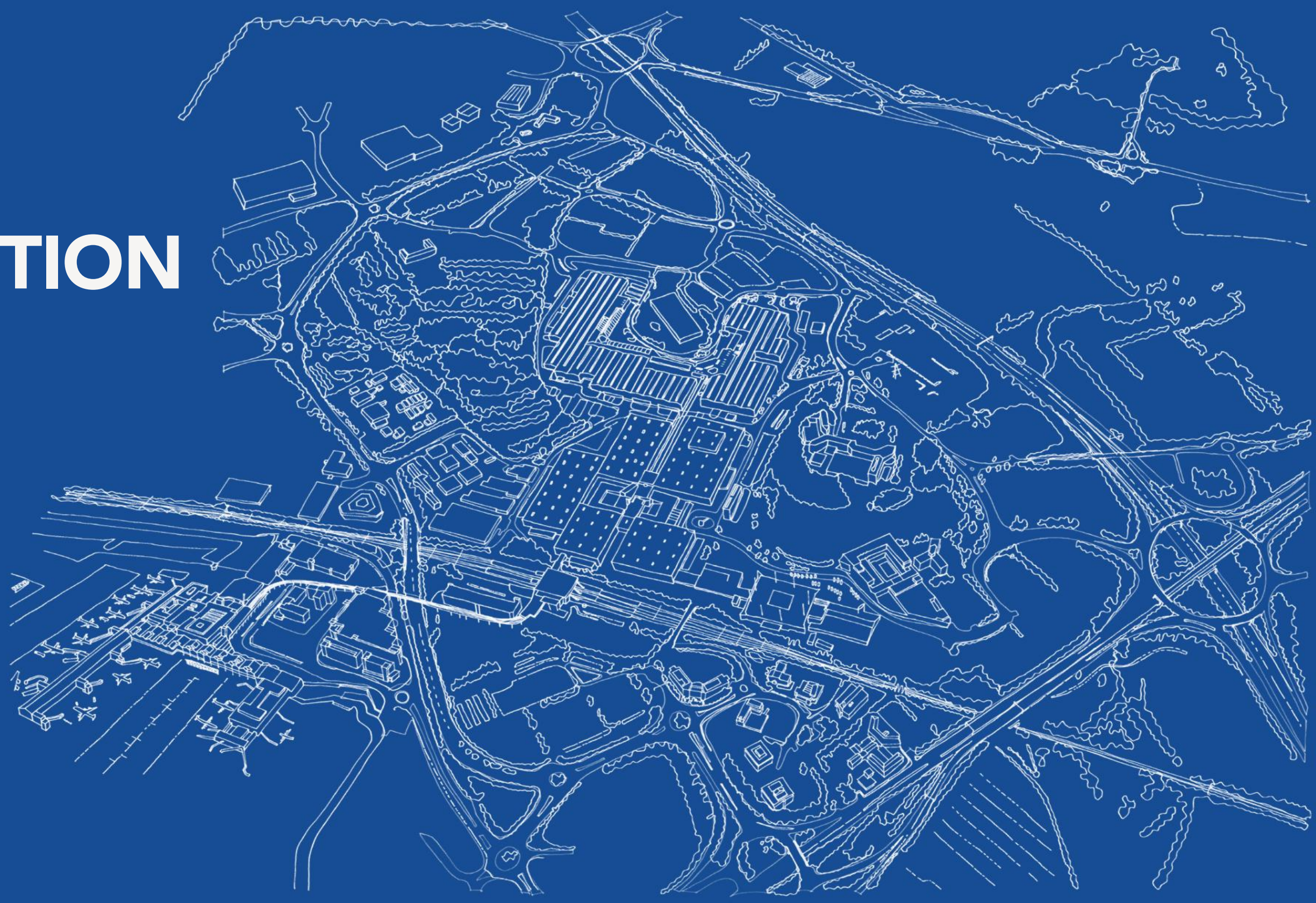
I am delighted to be able to launch this new Masterplan as the next chapter for the NEC site and wider region.

Paul Thandi, CBE DL

Chief Executive
NEC Group



1 INTRODUCTION



Introduction

In 1976, The National Exhibition Centre (the NEC) opened marking the beginning of a new economic era and international outlook.

Originally built with seven exhibition halls – the NEC now has 18 halls, 32 conference suites and a host of outdoor spaces. With 500 events every year, the NEC attracts over 2.3 million guests. As the UK’s number one venue of choice for organisers, exhibitors and visitors, the NEC helps enable a wider economic impact of £3bn.

The home of a **unique collection of leisure and business tourism attractions**, the NEC has grown in scale and reputation over the course of the past 40 years. This has included the addition of the Resorts World Birmingham retail and leisure complex, the Resorts World Arena, three hotels, and The Bear Grylls Adventure.

As one of the main investors in establishing the NEC operating company, Birmingham City Council, as the freehold owner, remains central to future development plans at the NEC site.

The NEC Group will continue to invest in the facilities at the NEC to ensure they remain at the leading edge of event venues. This will also help facilitate future growth.

Following the transformational impact on Halls 1–5 project in 2018, the ambition is to invest in enhancements to Halls 6–20. The opportunity to expand and cover the North Garden area will create an improved indoor space focused on offering additional food and drink outlets for visitors.

Further planned investment includes the multi-million pound roof extension to increase the capacity of the Resorts World Arena to over 21,000 people. Planning permission has been granted and work is set to commence in due course.

Building upon the successes this Masterplan sets out the **vision for future development** at the NEC site. It defines a framework for investment, establishing the scale of the opportunity and the principles upon which future development should be designed.

The Masterplan has been informed by a detailed assessment of the NEC site’s physical and environmental characteristics. The scale of development is underpinned by a market analysis of the demand and supply dynamics across key sectors.

The Masterplan is accompanied by a **sustainability strategy** which sets out a framework for the social, environmental and transport infrastructure to support development and secure positive sustainable outcomes for the future.

The opportunity at the NEC site arises from repurposing of surface level car parks and realising the development potential of underutilised plots.

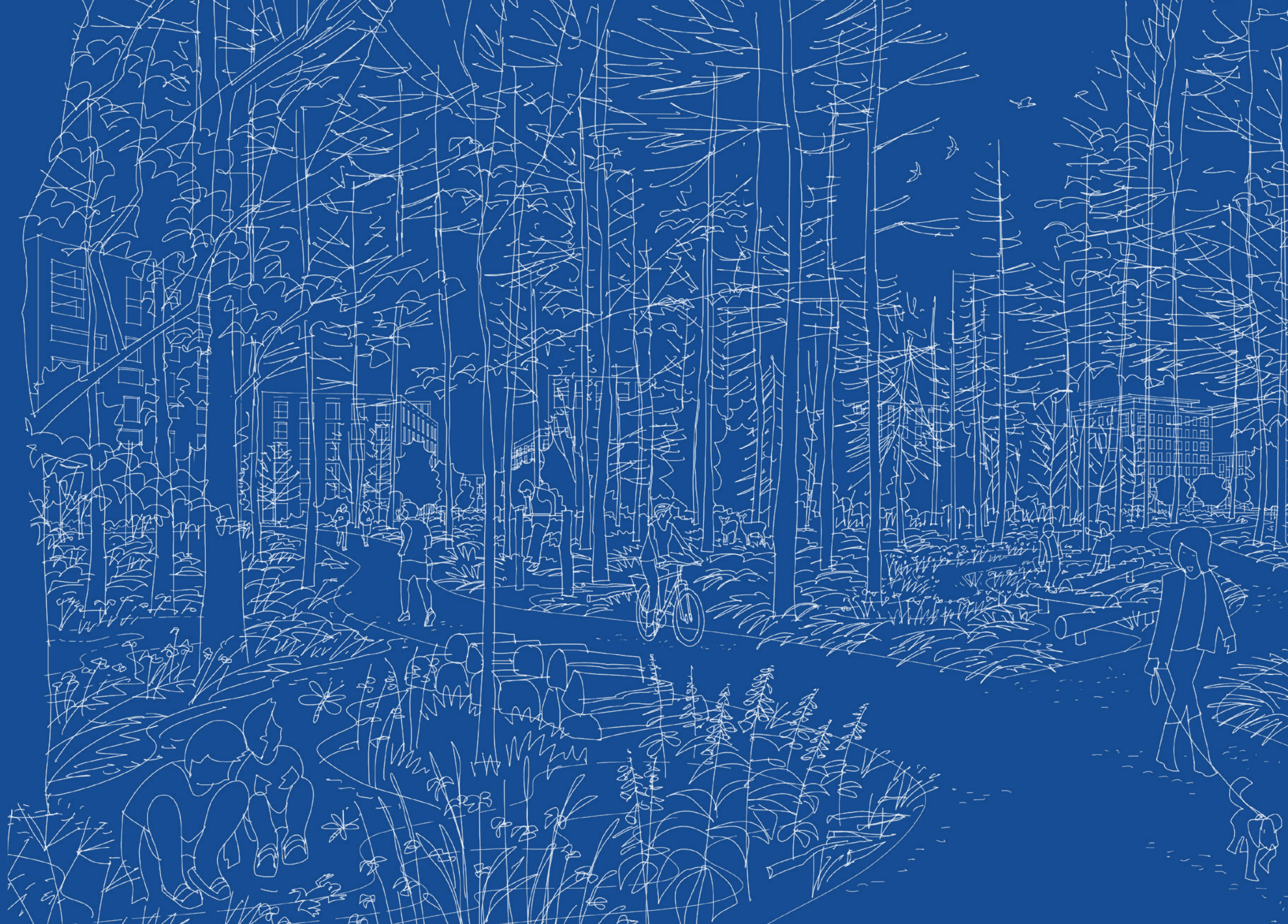
Development in this Masterplan is focused on the northern areas of the NEC site and infill around Pendigo Lake. The retention of the southern and eastern car parks reflects the existence of significant infrastructure constraints in this locality and the need to retain a level of operational car parking for events and exhibitions.

In the longer term the benefits of High Speed 2 and local public transport infrastructure improvements may enable the release of those southern and eastern car parks for further development.



↑
Piazza entrance, NEC

2 CONTEXT



Context

Located within the UK Central Solihull Hub Area, the NEC site is part of a collection of key economic assets including Birmingham Business Park, Birmingham Airport, the Jaguar Land Rover facility, Birmingham International train station, and Arden Cross.

UK Central has one of the most dynamic and fastest growing labour markets in the UK with notable sectors including automotive manufacturing, business and professional services, and leisure and entertainment.

With access to **road, rail and air travel** the area benefits from exceptional local, national and international connectivity. Birmingham Airport, accessed directly from the NEC by an air-rail link system, offers flights to over 150 international destinations and a further 490 global connections.

Opened in the same year as the NEC, Birmingham International rail station provides services to all areas of the UK including direct to London. The station is set to undergo a major investment programme to improve facilities and services.

Located adjacent to the M42 and A45, and close to the M6, M40 and M5, UK wide road connectivity is provided to the NEC site.



↑
NEC connectivity

→
UK Central Hub Area



The arrival of **High Speed 2**, with a new Interchange Station at Arden Cross, will further enhance what is an already well connected area. The new rail link will provide 38 minute journey times to London and new connections to the city centres of Birmingham, Manchester, Leeds and Liverpool. An automated people mover (APM) will enable passengers to travel seamlessly between the new HS2 Interchange Station, the NEC site, Birmingham International Station and Birmingham Airport.

Associated local infrastructure investment, totalling £1.6bn, is expected to result in the extension of the Midland Metro tram, rapid Sprint bus network, new walking and cycle routes and major road junction improvements.

Arden Cross, located around the new Interchange Station, is a 140 hectare development site with a vision for a sustainable, smart and connected new destination with opportunities for employment, skills, learning and living.



↑
Arden Cross and HS2 Interchange

The Jaguar Land Rover Solihull Manufacturing Plant is a vital part of the British automotive supply chain. It has a 70 year history of car manufacturing. The recent expansion with a new state of the art facility represented the largest single investment in the Solihull plant. Birmingham Business Park is the most established out of town business park in the Midlands with over 150 companies.

Across the whole region significant development plans are underway to deliver tens of thousands of new homes, hundreds of thousands of sq. metres of commercial space and billions of pounds of investment in infrastructure.



↑
M42

Planning Policy

Set in the context of national and local policy frameworks, future development at the NEC site will promote sustainable development and secure the delivery of much needed homes and jobs.

The Government’s **National Planning Policy Framework (NPPF)** sets out the importance of building a strong, responsive and competitive economy; supporting vibrant and healthy communities; and ensuring the protection and enhancement of the natural, built and historic environment.

Central to this national framework is a focus on meeting the climate change challenge, supporting the transition to a low carbon future, and shaping places that contribute to reductions in greenhouse gas emissions.

Improving resilience, and supporting renewable and low carbon energy and associated infrastructure are key.

Recognising the **need for new homes** the government is prioritising the supply of more land for housing. This focus on housing delivery is underpinned by the NPPF’s framework for the delivery of a variety of land opportunities for new homes to meet the diverse needs of the country.

Creating the conditions in which businesses can invest, expand and adapt is a further priority for the Government. Supporting **economic growth**,



↑
NEC, Resorts World and
Pendigo Lake

productivity and meeting the business needs of both local and international enterprises is vital to the future prosperity of the country.

The NEC site has an important economic role and future growth can contribute to supporting both national and local priorities.

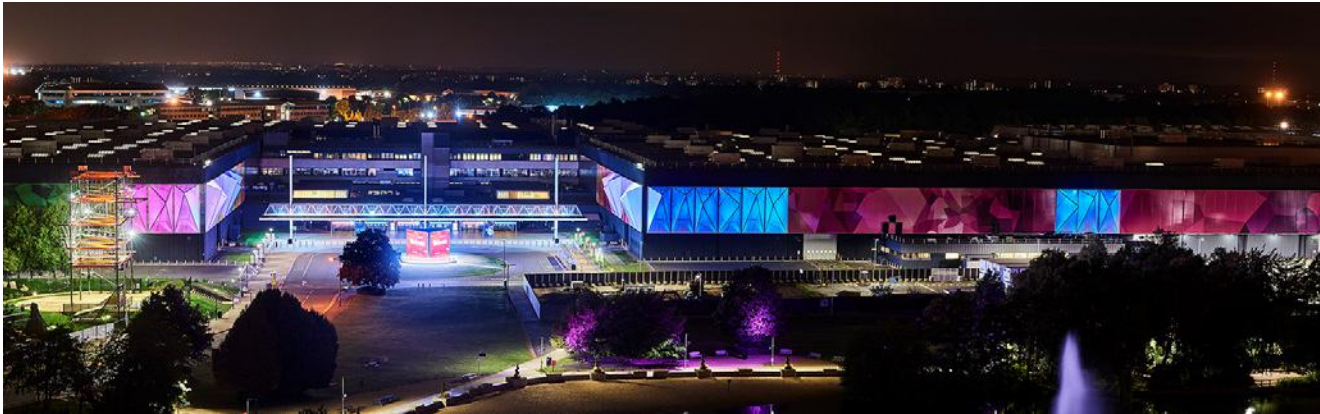
The **Solihull Draft Local Plan** emphasises the need to continue to support the success of the NEC along with attracting new uses and activities to the site.

Along with it’s economic role, the NEC site has the potential to deliver significant residential and commercial development meeting the housing and employment needs of the Borough and wider region. This will further support the objectives for sustainable growth and focusing development on brownfield land in well connected locations.

The scale of this opportunity was originally recognised and demonstrated by the nec.city Masterplan (2018), which included at least 2,500 new homes. The NEC site has been recognised in the Local Plan as the single largest housing development site in the Borough, contributing significantly to the housing land supply with 2,240 homes within the period to 2036.

Fundamental to future development and creating sustainable places is good design. At both local and national level clear policy and guidance on the design of development has been established.

This includes having regard to local character and conserving and enhancing natural and historic assets. Opportunities for innovation and making efficient use of land through increased density will inform the approach the development at the NEC.



↑
Piazza Entrance, NEC

3 THE OPPORTUNITY



The Opportunity

Across the West Midlands region population growth will increase the need for more homes and jobs.

For the Borough of Solihull, the population is projected to increase by over 10% by 2036, with an additional 12,000 households forming in this period. The arrival of High Speed 2 will bring further households relocating to the area, taking advantage of the improved connectivity and links to London.

This growth in demand is also being fuelled by people seeking to work closer to where they live, with the UK Central Solihull Hub Area being an ideal location due to the large concentration of major employers and exceptional connectivity.

The **population growth** in the Solihull area will be experienced across the demographic spectrum



↑
Solihull town centre

driving demand for a range of home types and employment opportunities. Making up the largest cohort of housing demand is 1 and 2 person households.

The over 65 population is expected to grow by 5–6% in the next 5 years, with the longer term trajectory indicating continuation of this trend. The aging population will lead to greater demand for smaller properties as people downsize. It will also put greater emphasis on creating places that support community and provision of local amenities as people look to remain active and connected.

The region is home to **one of the youngest populations** in Europe, with 32% under the age



↑
Birmingham airport

of 25, and diverse communities comprising 190 nationalities. Benefiting from 12 universities, the region has over 70,000 graduates per year with the UK’s second highest graduate retention rate.

The trend for people moving out of London to the West Midlands is to set to continue over the coming years, boosted by the arrival of High Speed 2. This will lead to increased demand for apartment living and smaller family housing located close to the stations.

Aligned with this population growth is a continued **demand for employment space** from a range of sectors including business, professional and financial services, advanced manufacturing and life sciences. The M42 corridor is recognised as a key out-of-town office location that is attractive for businesses with access and population benefits.

Low supply rates coupled with increasing obsolete stock and market demand emphasis the need for a future supply of **good quality office accommodation**. There are opportunities to deliver small clusters of office buildings within the M42 corridor.

As an established events and leisure destination the NEC site has a strong hotel offering with international brands. To complement this existing provision and that found in the wider UK Central Hub Area there are opportunities for **lifestyle brands that offer a boutique feel and style appealing** to guests wanting a more design-led, authentic and social experience.



↑
Solihull town centre

Future development at the NEC will benefit from the existing landscape with over 300 established trees, many of which are mature, and **extensive hedgerows** and a series of **watercourses and ponds**. The adjacent **Bickenhill Plantation**, a site of importance for local nature, provides a diversity of fauna and flora, and is a unique asset for the area.

The existing watercourses on the site, draining into **Pendigo Lake and Hollywell Brook**, can be utilised for sustainable urban drainage and creating habitats for wildlife.



↑
Pendigo Lake

With Marston Green in close proximity, facilities and amenities including schools, healthcare, convenience shopping and other services can be easily accessed by bus routes and active travel modes.

Arising from the repurposing of existing surface level car parking and individual infill plots, the NEC has a net developable area of 27ha that can capitalise on the market opportunities and growth.



↑
Bickenhill Plantation

↑
Resorts World looking out onto
Pendigo Lake



4 VISION & STRATEGY



Vision

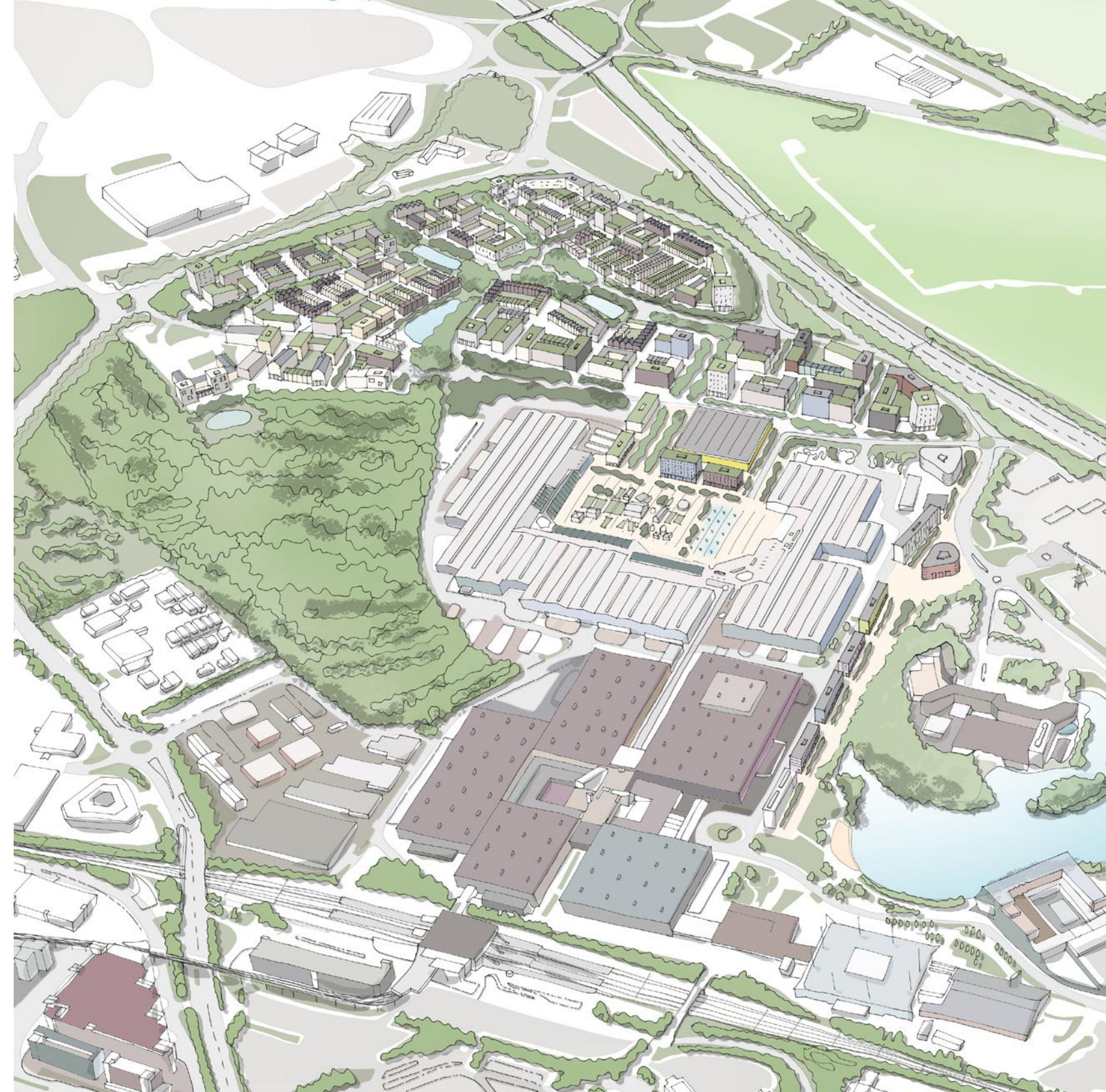
Our vision is to create a unique environment for living, supported by new space for working and leisure, further enhancing the vibrancy and attractiveness of the NEC site and driving existing operations.

An Urban Village will create a new community of over 11,000 people living in a mature and green landscape. With 5,000 homes this highly sustainable community will include all the amenities and facilities for everyday life.

At the heart of the site a Grand Plaza will redefine the area surrounding the NEC Atrium Halls creating a destination with a dynamic outdoor event space enlivened by leisure, retail and a hotel.

An Urban Boulevard with an inspirational public realm, new commercial buildings and ground floor leisure and retail, will provide new pedestrian connections and link to Arden Cross and the HS2 Interchange Station.

New uses will bring a greater intensity of activity, further animating Pendigo Lake and complementing and strengthening the NEC site's existing reputation as a destination for events and leisure.



Strategy

The transformation at the NEC site will deliver new homes, offices, leisure and community space, supported by investment in the public realm, environment, and sustainable and active travel.

The **Urban Village** of 5,000 homes, located in the north of the site, will be formed around extensive blue and green infrastructure. The new community of over 11,000 people will be **living in the landscape** as part of a high density residential development. Harnessing the existing mature landscape, the network of green routes and spaces will place nature on the doorstep of every home. A **new public park** at the heart of the community will provide space for leisure, recreation, community growing and local events.

With a **mix of homes**, including apartments, town houses, villas, and independent living, the urban village will become a place for everyone. Meeting the everyday needs of the new community will be a range of services and amenities including a **primary school, mobility hub**, and a **local centre** with shops, cafés and community space.

Bickenhill Plantation will be integrated with the urban village to become an **ecological haven** with nature trails and walks accessible to the local community and visitors. Preserving and enhancing the biodiversity value of the plantation

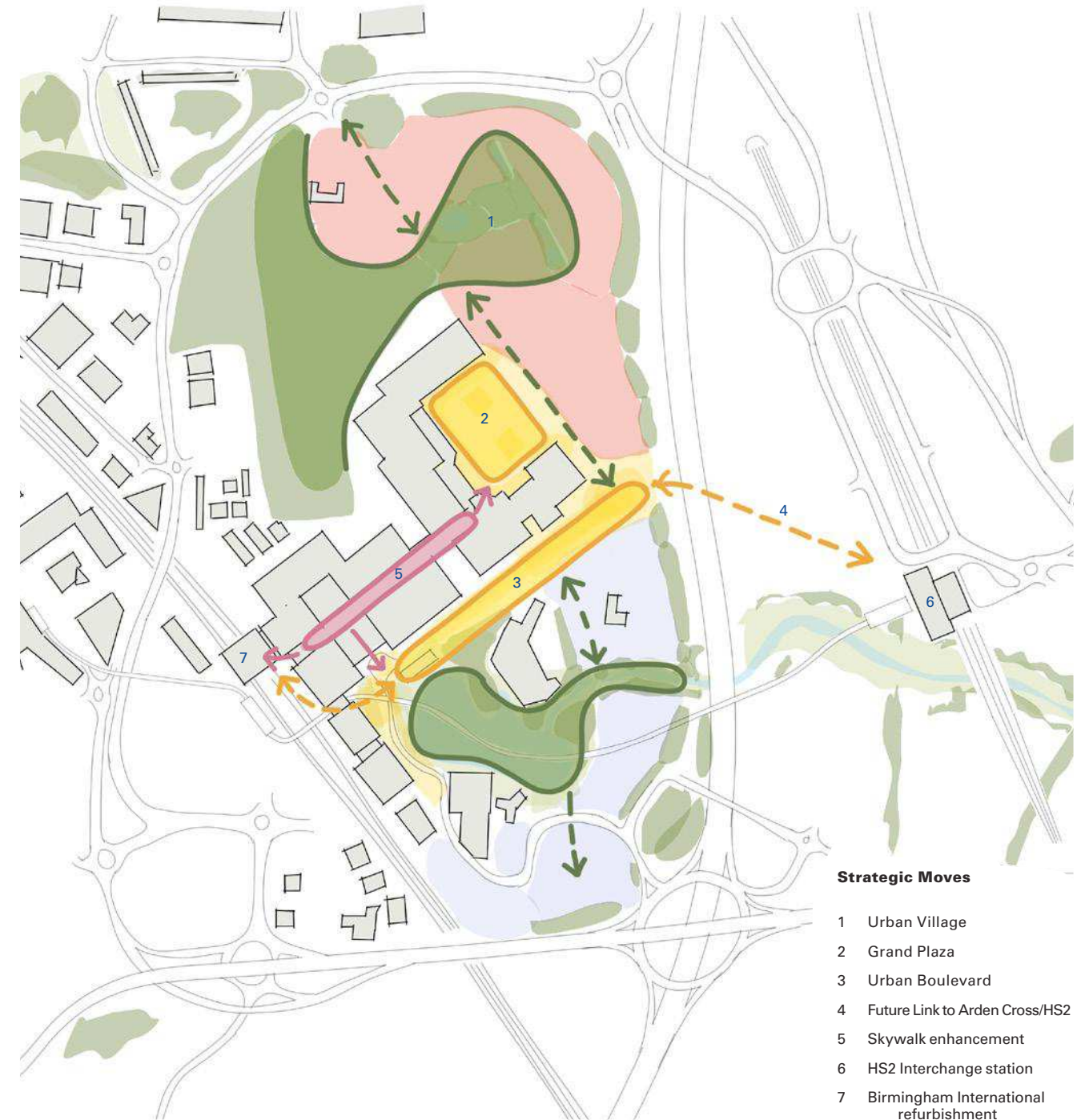
will reinforce the uniqueness of this asset and support a thriving habitat for wildlife and bring wider sustainability benefits.

Active and sustainable travel will be embedded within a network of pedestrian and cycle routes enabling access to employment opportunities and linking to the exceptional public transport services for onward travel. The onsite mobility hub, located within the local centre, will be central to promoting the use of sustainable and active travel.

The **Grand Plaza** will include a 14,000 sq. metre flexible events space and mix of commercial and leisure uses.

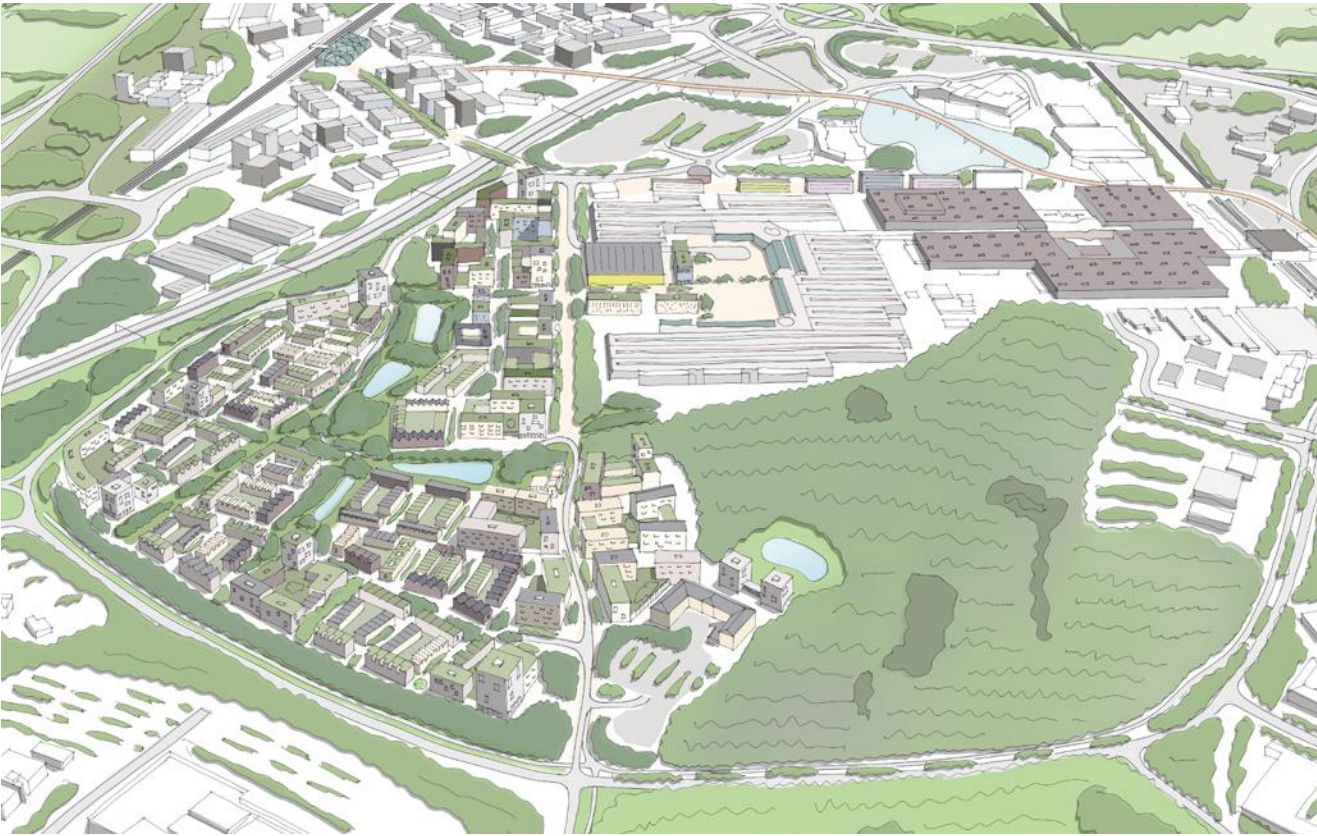
It will become a focal point throughout the day and evening enhancing the visitor experience and serving the wider community.

The **Urban Boulevard** will establish improved connectivity to the new High Speed 2 Interchange Station at Arden Cross and Birmingham International. With a pedestrian and cycle focus the route will include green and blue infrastructure as part of a high quality public realm.



Maximising the outlook onto Pendigo Lake and increasing the **intensity of activity** will be a mix of new uses to complement and further enhance the NEC's existing destination offer. Along the Urban Boulevard a cluster of modern office buildings, with ground floor active uses, will create space for businesses to flourish and generate new employment opportunities.

- Illustrative Masterplan**
- 1 Local Centre
 - 2 School
 - 3 Townhouses example block
 - 4 Apartments example block
 - 5 Green Heart: Urban Park
 - 6 Grand Plaza
 - 7 Urban Boulevard
 - 8 Route through the plantation



↑
Illustrative sketch of
the urban village





5 DEVELOPMENT PRINCIPLES



The Urban Village

As a place for everyone the 5,000 home urban village will create an inclusive and sustainable community with a mix of homes, amenities, and access to nature and public spaces.

Homes

Responding to the way people want to live now and into the future the tenures and typologies of housing will meet a range of housing needs.

Apartments, duplexes, townhouses and larger villas will meet the needs of the growing population and contribute to creating a vibrant community that appeals to a mix of households. The types of homes will include 1, 2 and 3

bedroom apartments, 2 and 3 bedroom houses and larger properties of 4 plus bedrooms.

The Masterplan envisages an approximate 70/30 split between the apartments and houses. These proportions are in response to the locational context of the site including the level of connectivity to public transport, the nature of adjacent uses, the ambition to achieve a highly sustainable development, and the local housing needs.



A first phase of 2,240 homes will establish the urban village and the quality of place with local amenities.

Build to rent (BTR) accommodation will offer a genuine choice for households seeking a high quality rental experience with access to longer term tenancies. The integration of BTR will enable homes to be delivered on site from an early stage of the development to establish the sense of place and create a pioneering community. This product will be accompanied by ‘on-site’ facilities and amenities that the modern renter expects, including gym, bar, cinema, lounge, workspace and 24/7 concierge.

Designed around the needs of older people will be an **independent living offer** that will provide adaptable living environments and supporting amenities. Integrated within the urban village and close to the local centre, this specialist accommodation will provide shared facilities and private outdoor space to support the health and wellbeing of residents. An independent living development of circa 200 units is an optimum size for an attractive contemporary retirement apartment scheme.

Defining a place that is inclusive for all will be **affordable homes**, including starter homes. The homes will be designed to the same high standards so there is no visible difference between the affordable and other properties.



↑
Townhouses and Apartments at
Royal Wharf, London

Community uses

Across the urban village a range of local services, amenities and community spaces will be integrated.

Designed for the whole community **the local centre** will become a place where people can meet, access daily services and enjoy social life. The mix of uses will include a community space for a nursery and local clubs, a convenience store, café, food outlets, health facility, a primary school, and a mobility hub. The local centre will be focused around a public square that can play host to local events such as fêtes, markets and cultural performances.

Located in proximity to Bickenhill Plantation and the Parkway, the local centre will be accessible to the whole community.

The existing mature landscape and public park will provide a green setting for the local centre and all the amenities it has to offer.

The **new primary school** will ensure that the urban village is an attractive place for families. Located by the local centre the school will have a frontage onto the public square and be easily accessible by foot or bicycle.



↑
New primary school



↑
Vision for the local centre

The incorporation of outdoor play space, utilisation of roof areas for gardens and the proximity to Bickenhill Plantation will enable the school to provide an enriching environment benefiting the learning experience.

The **mobility hub** will be a highly visible, safe and accessible space where public, shared and active travel modes are co-located. The hub will have a cycle and scooter hire facility, rapid EV charging, Taxi and DRT pick up/drop off, amazon lockers, bike shop repair, space for a car hire/share scheme to operate and an information centre.

As technology develops the local centre can provide opportunities for zero emission shared transport and other alternatives to single occupancy car journeys including autonomous vehicles.

Should **public transport services** be brought through the site then interchange facilities can be provided as part of the mobility hub. The hub’s location within the local centre will help to raise the profile of shared mobility services to boost utilisation and viability. The early provision of the hub will support modal shift and promote low car lifestyles. This approach aligns with car parking provision and approach to the public realm.



↑
Cycle infrastructure in London



↑
Public space for community events at Royal Wharf, London



Landscape

Rooted within a **green and natural landscape**, every home will have access to green space.

The streets, spaces and buildings of the urban village will form a unique townscape. Defined by the existing mature landscape with its trees, hedgerows, watercourses and ponds the urban village will be a place where people and nature can flourish side by side.

Weaving **ecological enhancements** and new green and blue infrastructure features into the existing landscape will create new opportunities for habitat creation and sustainability benefits. This will support a place that will stand the test of time and remain an attractive environment long into the future. The landscape of the urban village

will establish stepping stones for nature across the site and onto the wider area.

The careful management and intervention will enable mature trees to become veteran trees, the replanting of existing hedgerows will improve structure for improved flowering and foraging for wildlife, and the enhancement of the mixed plantation woodland that exists around the boundaries of the site as habitat corridors.

Included within the natural landscape and open spaces of the urban village will be **areas for play, community gardening, water features and space for relaxation**. Along with the biodiverse rich environment these spaces will support the health and wellbeing of the local community.



↑
Landscape Analysis



↑
Landscape Strategy



↑
Vision for living in the landscape

Running through the centre of the urban village will be **a public park**. Defined by the existing mature landscape the public park will provide multi-functional and flexible space with opportunities for recreation, play and engagement with nature.

In the west the park will connect with the local centre and include **a new public square** and a water feature, formed by the existing pond, creating a tranquil setting. The mature trees will bring wildlife into the heart of this space. Blending into the Bickenhill Plantation the new park will create a continuous open space.

As the park extends eastward and south through the urban village it will evolve to include **natural play elements** and more formal space for recreation with children's play and multi-games areas. **Space for community growing** and productive landscapes will bring many benefits for the whole community.

The carefully managed opening up of **Bickenhill Plantation** will provide further opportunities for open space and habitat creation. Nature trails, walks and recreation space will provide opportunities for outdoor play, and support a more attractive environment for residents.



↑
Pendigo Lake

→
Vision for a green heart and
a new public park



The plantation's **ecological value** will be enhanced through careful clearance of low value trees and the restoration of wetland areas that have been lost over time. The opportunity to restore a wetland area would bring significant biodiversity, carbon and community benefits for the area.

The type of environments will be carefully designed and managed to ensure species are appropriate for the area including recognising the proximity to the airport.

Across the landscape a **holistic approach to water** will bring multiple benefits through the management of flood risk, improvement in water quality, enhancement of public spaces and support for biodiversity.

A variety of **sustainable urban drainage** solutions will be utilised across the public realm including swales, ponds, permeable paving, planting and green/brown roofs. Contributing to both water management and providing further habitats for local wildlife, sustainable urban drainage will become a vital part of the green and blue infrastructure.

These measures will mitigate any impact to Holywell Brook from any increased surface water runoff and help maintain its importance as an ecological feature, alongside Pendigo Lake.



Character, height & density

The design of the buildings including their height, scale and massing will be defined by the ambition for a **high density development** that is an attractive place to live now and into the future. With densities at 150–200 dwellings per hectare, the urban village will support a viable mix of uses and allow for the efficient use of available land.

The urban village will incorporate a range of building heights. Forming the frontage and main interface with the surrounding road network will be 6 to 8 storey apartment blocks defining the perimeter of the Urban Village. Set back from the road by a landscape buffer the apartments will provide a mix of 1, 2 and 3 bedroom accommodation with potential for duplexes at ground level.



Character and Density

- 1 Green Heart: Urban Park
- 2 Local Centre
- 3 Green Avenue
- 4 Higher density around Local Centre and Plaza
- 5 Lower density family living around Green Heart
- 6 Urban Fringe: transition from lower to higher density at edges.



Masterplan Framework

● Opportunity for marker building

Taller marker buildings at circa 15 storey should be located at key gateways and junctions within the urban village. **Mid-rise buildings** at 10–12 storey will define important spaces and placed along key routes. These taller elements will support orientation and wayfinding within the development.

Lower rise buildings will form the central typology of the urban village, principally located along pedestrian-focused streets and intimate spaces. Ranging from 2 to 6 storey, the low rise buildings will include apartment mansion blocks, townhouses and urban villas.

The **orientation and form** of the urban blocks will create a sense of enclosure, supporting passive surveillance of the streets and spaces, and promote privacy and outlook.

Homes adjacent to the M42 and Bickenhill Parkway should seek to place rooms that are less sensitive to noise including kitchens, lounge and dining space, bathrooms, storage and utility areas, stairwells, and workspaces facing outward. These facades should be provided with sealed glazing to the noisy side of the buildings whilst ventilating from the quieter side.

The apartment buildings will be designed as a podium, incorporating duplexes and larger family townhouses that will have a front garden onto the residential streets and green lanes.



↑ Density and landscape:
Royal Wharf, London

The inclusion of duplex and townhouse typologies will allow passive surveillance, **activating the street frontages** and enhancing life at street level. The orientation and design of the buildings with lower and medium rise elements will allow natural sunlight to reach the rooftop amenity areas of the podiums and enhance their setting.

Access for servicing and parking will be appropriately accommodated within the blocks, placing parking, refuse and storage away from the streets as much as possible.

The **materiality** of the urban village will contribute to the creation of an inspiring townscape incorporating natural materials with stone and brick finishes.

High quality architecture will reflect the modern outlook of the development. Technology will be integrated into the buildings where it improves sustainability and residents’ quality of life.



↑
Green podiums:
Royal Wharf, London



↑
Apartment living: Kidbrooke
The NEC Masterplan

↑
Apartment living:
St. Andrews, Bow



↑
Family housing:
Port Loop, Birmingham

↑
Family Townhouses:
Royal Wharf, London

The streets & spaces

The streets and spaces of the urban village will be designed to promote walking and cycling. This will allow residents to access all the amenities, facilities and wider public transport network.

The streets and spaces will be **legible and permeable** supporting people to walk and cycle to their destinations promoting active lifestyles.

The **street hierarchy** of the urban village will be formed around a network that will include a central avenue, residential streets and green lanes. The design and use of the space will reflect the purpose and role within the movement hierarchy of the site.



Spaces Hierarchy

- 1 Grand Plaza
- 2 Urban Boulevard
- 3 Landscape Boulevard
- 4 The Park
- 5 Green Square
- 6 Village Square



↑ Parkland: Kidbrooke Village
The NEC Masterplan

↑ Shared amenity space:
Port Loop, Birmingham

↑ Pedestrian streets and spaces:
Royal Wharf, London

The Avenue – forming a central spine through the site the avenue, will be the principal street and connection.

Integrated with the public park the avenue will connect from the entrance at Bickenhill Parkway, through the local centre and link to the route to the Grand Plaza and urban boulevard.

As the primary focus for vehicular movement it will be tree lined, incorporating soft landscape and formal lighting. Dedicated space for cyclists and pedestrians will support active travel modes across the site.

The avenue will be future proofed to accommodate a public transport route connecting through the site and onward to Arden Cross and the HS2 Interchange Station.

Access points to the residential streets will span from this primary street with transitions defined by a change in surface materials and the greater emphasis on natural landscaping.

A bus gate will enable emergency vehicles and the potential for public transport access from the avenue onto Northway and through to Arden Cross.



- Street Hierarchy**
- 1 The Avenue
 - 2 Residential Streets
 - 3 Green Lanes



↑
Vision for multifunctional
landscape: green heart and
the avenue

Residential streets – will bring the landscape to the front door of the homes. The streets will incorporate shared surfaces lined with low level planting and trees. Car parking will be carefully designed to minimise its appearance in the streetscape.

The inclusion of soft landscaping and natural finishes will establish a high quality public realm. Planting, culverts connected to rain gardens and permeable paving will provide both ecological value and local capacity for managing surface water.



↑
Kidbrooke village

↑
St. Andrews, Bow



↑
Vision for the residential streets

Green lanes – these intimate spaces will provide the main access to the homes incorporating informal play, hard and soft landscaping and attenuation swales.

Defensive planting will define the public and private elements of the space. Ecological features and tree planting will enhance opportunities for wildlife to flourish.

Limited and/or restricted vehicle access will be adopted across the lanes to support pedestrian friendly environments and take on the role as havens for wildlife as part of the wider network of habitats.



↑
Pedestrian route:
Catford Green, London

↑
Section through street hierarchy



↑
Catford green



↑
People focused spaces:
Port Loop, Birmingham



Movement

The movement hierarchy will prioritise sustainable and active modes.

The introduction of a **new route through the Plantation** will support pedestrian and cycle connections to Birmingham International and access to the services for onward public transport.

The proximity to **Bickenhill Parkway** will provide convenient access to local bus routes. Planned infrastructure to be delivered in the area, including the Sprint route between Birmingham and the NEC, cycle corridor route enhancements, and walking corridor improvements will further enable sustainable access to the site.

The redesign of the main roundabout at Bickenhill Parkway with new pedestrian crossings and introduction of traffic signalisation will better manage vehicle movements and enable those walking and cycling to better access the wider network.

In the longer term Bickenhill Parkway could be redesigned to reduce the dominance of the road and create an environment more akin to an urban boulevard including more space for cycleways and pedestrian routes.



↑
Cycle routes and
landscaped environment

→
Concept plan for
pedestrian movement



Sustainable resources

The adoption of **sustainable approaches to energy, waste and ongoing management and maintenance** of the public realm will create a resilient urban environment and support sustainable living.

The **energy strategy** will apply a hierarchy to reduce and manage energy use and promote renewable generation. The hierarchy will be formed around four key elements:

- Use Less Energy – reducing energy use and improved building efficiency.
- Supply Energy Efficiently – utilising low-carbon solutions.

- Use Renewable Energy – adopt on site generation.
- Network supply – connecting to the traditional network for electricity supply to bridge the gap.

The future energy strategy will set targets for the operational energy performance to reduce the ‘performance gap’ between design and actual energy use.

Water will be an asset for the development with the focus on management through replicating natural systems as much as possible and attenuation and treating water as close to source as practicable. In localised areas the treatment of foul water could

be achieved through natural solutions such as reed beds.

Reusing surface water for irrigation and grey water reuse will reduce pressure on the wider system and build long-term resilience to climate change across the development.

Integrating sustainable urban drainage systems as part of the wider natural landscape will deliver a range of environmental benefits such as air quality, water purification, climate mitigation, enhanced biodiversity and amenity value within the public realm.

The approach to the **management of waste** will align with current policy and best practice with opportunities for more sustainable and localised solutions integrated as a critical mass of homes are delivered.

Central to the long-term sustainability of the development will be an emphasis on **placekeeping**, ensuring that every aspect of the urban village takes account of how the place will look and feel once it is lived in and used. The management and maintenance of development will need to be structured to achieve this focus on placekeeping.



↑
Incorporating renewables into building design



↑
Water management: Kidbrooke Village

The Grand Plaza

The new Grand Plaza will become a focal point for the whole site, creating a vibrant destination with space for events and exhibitions.

The Grand Plaza will transform the existing area surrounding the NEC Atrium Halls with a new outdoor event space of circa 14,000 sq. metres. Complementing the existing halls, the outdoor exhibition zone will utilise pavilions and performance stages to create an environment for performances, exhibitions and shows.

This new space will be connected to the urban village through pedestrian routes and the Avenue. It will provide amenities and facilities for the residential community along with a location for community events.

The Plaza will have an **active streetscene** with a mix of local leisure, retail, and food & beverage uses.



- Plaza Framework**
- 1 Events space
 - 2 NEC arrival
 - 3 Cafe spill out
 - 4 Service yard



↑
Mercedes Benz Platz, Berlin

Set within a high quality public realm the Plaza will be a place that people will want to visit during the day and into the evening. The ground floor outlets will spill out onto the streets and opportunities for workspace will add further activity.

A new **hotel** fronting onto the events space, will add to the NEC’s existing accommodation offer. It will provide a new lifestyle oriented, upscale product capitalising on changes in consumer needs and filling an existing market gap.

The buildings of the Plaza will be circa 5–7 storey height, reflecting the grain of the surrounding development.

With an **accessible and connected** environment the design of the public realm will mean people can easily navigate the area and access the Plaza from across the whole site.

Formal landscaping will link into the wider site with pedestrian and cycle movement prioritised.



↑
Vision for spectacular events space: the Grand Plaza

An enhanced **drop off and welcome zone** will enable convenient access for those requiring more direct access to the Grand Plaza and neighbouring halls.

The provision of a new multi-story car park can provide better accessibility for those visiting the NEC and free up surface level car parking for development.



↑ Outdoor events

↑ Granary Square, King's Cross

→ Vision for The Plaza:
evening events and activity



The Urban Boulevard

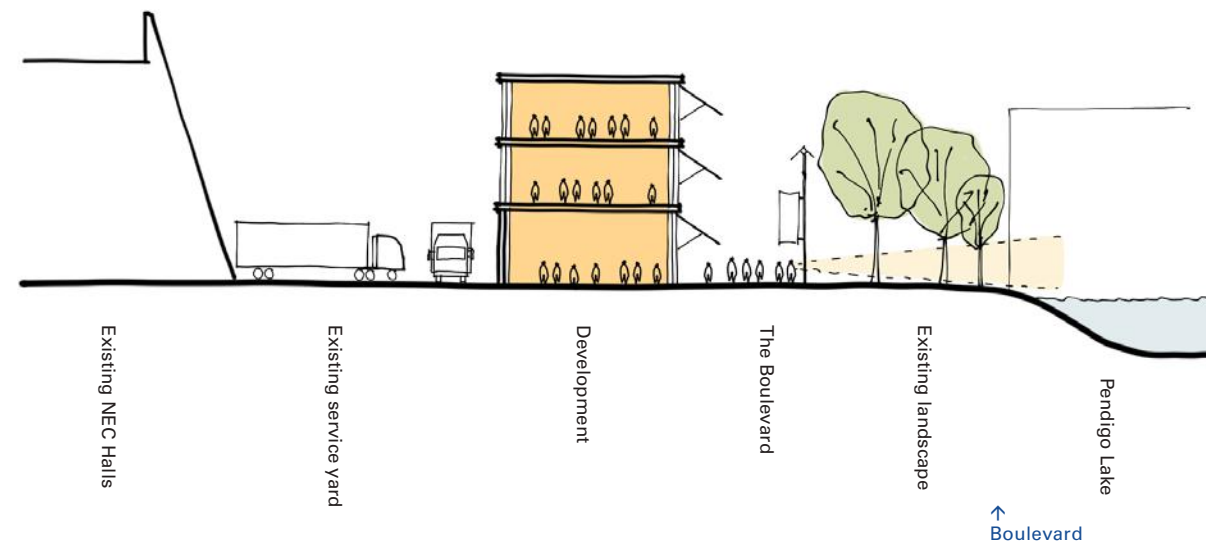
Establishing a new east-west link, the urban boulevard will connect the NEC site, Arden Cross and High Speed 2 Interchange, and Birmingham International.

The boulevard will be a pedestrian and cycle focused space forming part of the wider network of pedestrian and cycle routes extending from the urban village to areas beyond the site. The boulevard will link across a planned multi-modal bridge over the M42 providing a further direct connection to Arden Cross and HS2.

Increasing the intensity at the NEC site, the boulevard will become enlivened with exciting public realm and mix of buildings and active frontages.

Linking to Pendigo Lake the Boulevard will create an extended leisure and recreation attraction at the NEC site. With opportunities for up to 6 new buildings along the Boulevard, a range of flexible spaces will complement the existing offer and provide space for new uses.

Attractive to both new and growing businesses the new buildings can provide high quality office space in a location that has access to all the amenities and facilities that modern enterprises and their employees seek.



↑
Pancras Square, King's Cross

↑
Wembley Way

The ground floors of the office buildings can be occupied by food & beverage, retail and small leisure facilities spilling out onto the public realm.

The new Moxy Hotel has established the approach to the Boulevard with the linear form of development in this location being extended.

The public realm will include hard and soft landscape features. Space for pop-up markets and food stalls will further activate the space and extend the vibrancy from the Grand Plaza to the Piazza Entrance.



↑ Granary Square, Kings Cross

↑ Kings Boulevard, Kings Cross

→ Vision for the Urban Boulevard



Access & Car Parking

Maintaining operational access and car parking for events and exhibitions at the NEC will be an essential part of the overall development plan for the site.

In order to minimise the impact of the development on the external highway network as well as the NEC's day-to-day operation, the different traffic types will be kept separate. The residential traffic to the urban village will access from the Progress Way roundabout and logistics and visitor traffic can access the site via Northway, Eastway or Southway.

To provide **operational resilience** and future capacity, better utilisation of existing access points and surface level areas will be made. This could include reopening Morris Way to provide new logistics access to the site.

Multi-storey car parks can be constructed to retain a level of car parking in line with the NEC's longer term car parking strategy. The amount of car parking will respond to the investment in local

public transport and the scale of modal shift. EV charging points can be integrated in both the retained car parking and as part of any future multi-storey car parks to support the overall ambition for zero carbon.

Opportunities for zero emission shared transport and other alternatives to single occupancy car journeys including autonomous vehicles could be utilised across the site.

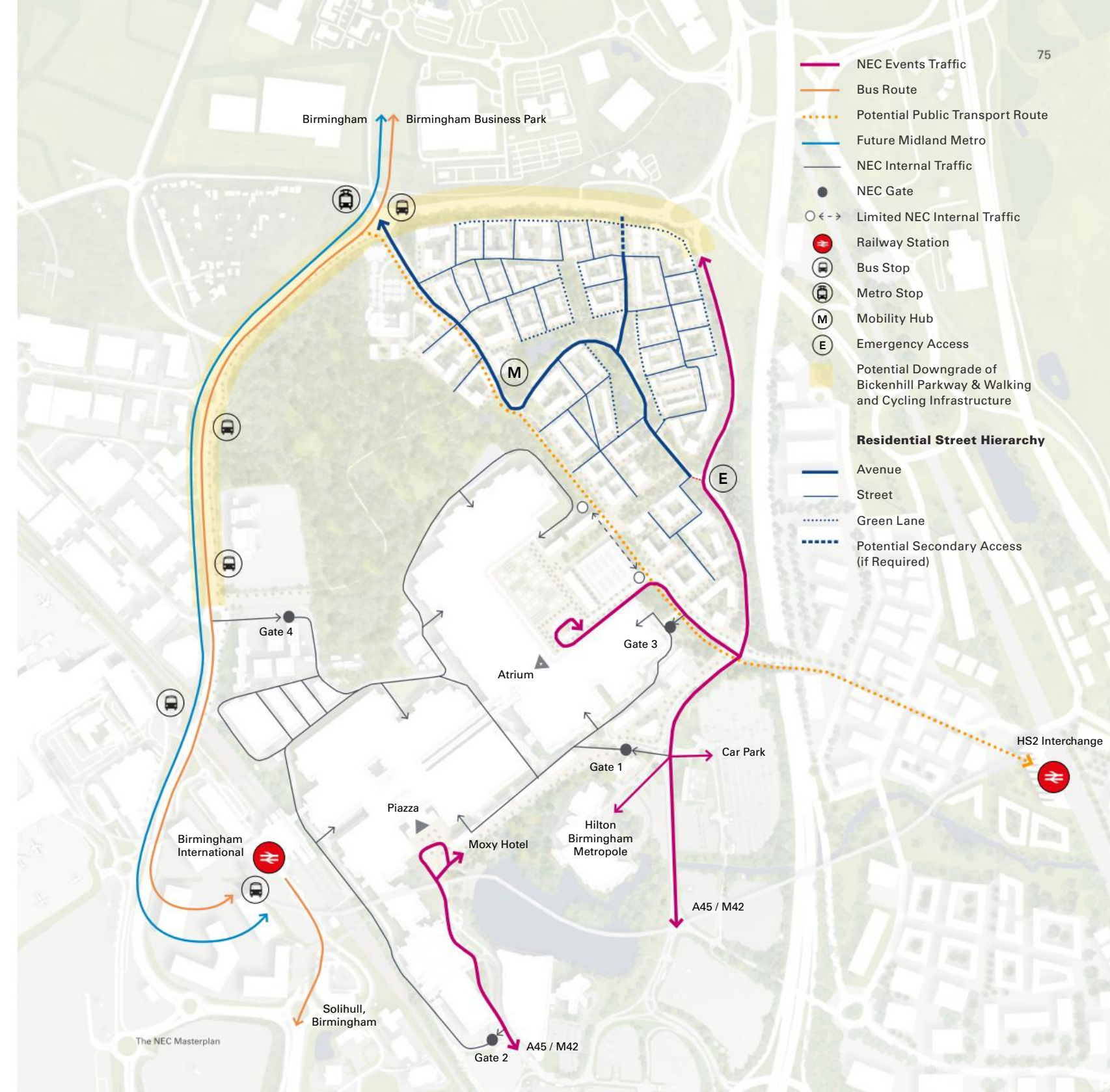
Where viable and aligned with NEC operations PV could be incorporated within structures.

Across the NEC site opportunities for investment in the public realm can be taken along main pedestrian routes from the car parks to the halls to enhance the visitor experience.

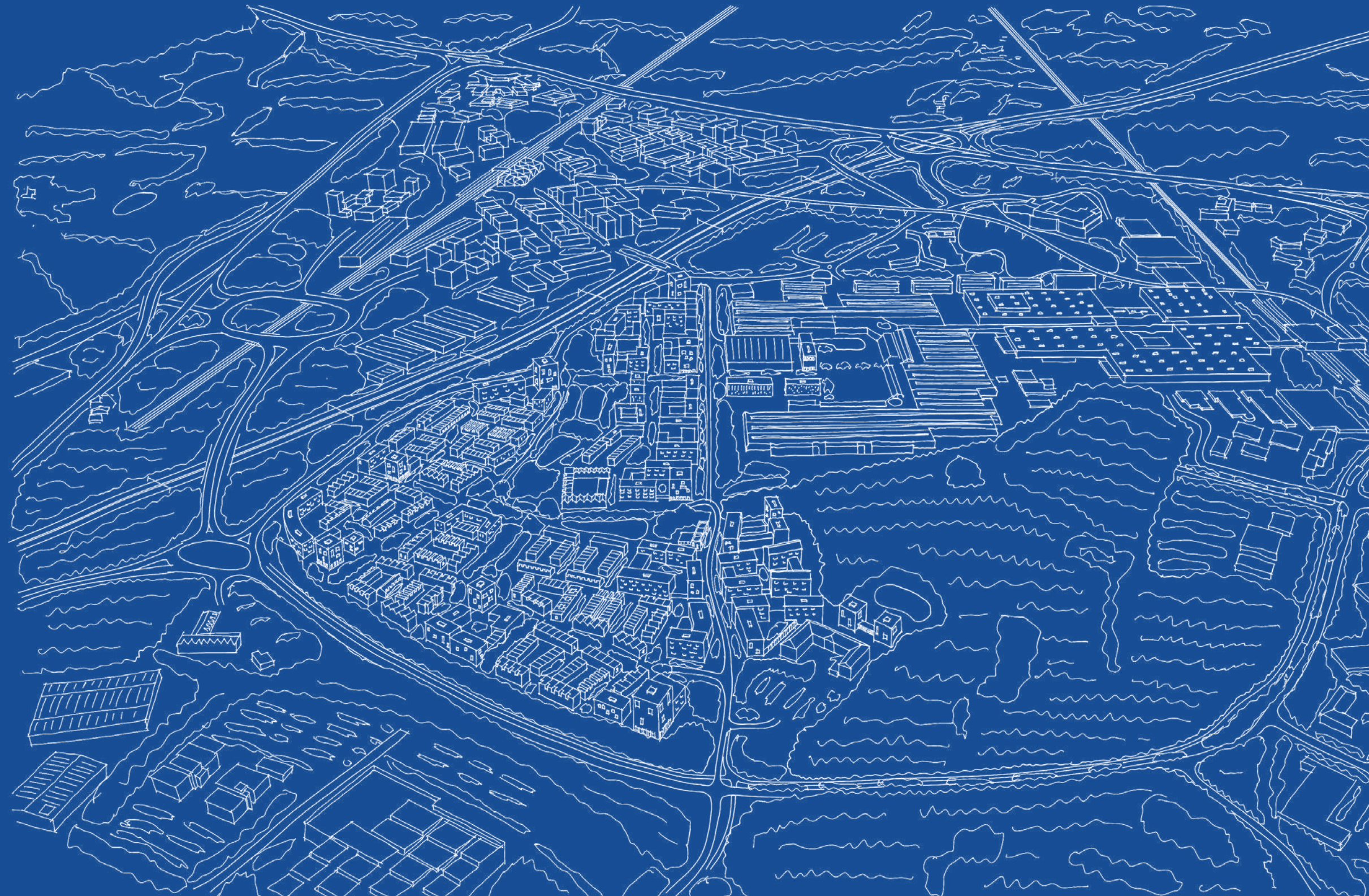


↑
St Andrews, Bow:
Parking and Landscape

→
Concept plan for
site wide movement



6 DELIVERY



Delivery

The NEC Group and Birmingham City Council (BCC), as the landowners, are committed to working in partnership to unlock development at the NEC site. The recent renewal of exclusivity rights to work together to progress development and the launch of this Masterplan are key milestones on this journey.

The **delivery of the first phase** of the urban village is a key priority for Solihull Metropolitan Borough Council (SMBC), with the site being the largest residential development opportunity in the Local Plan.

Our ambition is to deliver at pace, capitalising on the site's location and the maturity of the infrastructure and landscape. The first phase of 2,240 homes will be completed by 2036.

Our confidence to achieve this timescale stems from requiring limited new infrastructure to enable this first phase of development. The supporting amenities and services for the new community including a primary school, convenience store, healthcare and community use, a mobility hub and open space are clearly set out in this Masterplan.

Access to the site is already in place from the road network via the Progress Way / Bickenhill Parkway roundabout. Developable plots are

defined by the existing internal road layout, and minimal alterations and additions are required to service the plots. An existing extensive drainage network with balancing ponds and watercourses sets the framework for a sustainable urban drainage system.

The site's mature landscape with trees and hedgerows, and the neighbouring Bickenhill Plantation provide the sense of place from the outset.

Detailed site assessments have been completed giving a clear understanding of the site's physical characteristics including above and below ground conditions and the mitigation measures necessary to enable development.

The land to accommodate the first phase will utilise available space that is either not currently used for parking for NEC events or the loss as event parking can be managed across the wider estate.

→
Vision for transformation with
Grand Plaza and Urban Village



The location of the NEC also means **future development is well served** by existing retail and leisure facilities, job opportunities, high frequency bus routes running along Bickenhill Parkway, and a mainline train station within walking/cycling distance. This accessibility will be further enhanced by the new High Speed 2 Interchange Station, which will be located adjacent to the site.

The number of homes not only creates a critical mass to support placemaking it also presents a scale that is attractive to experienced developers who have a track record in delivering development

at pace. The different housing types, modern methods of construction, and market sentiment buoyed by demand will all underpin the pace of delivery.

The delivery of the first phase of the urban village, by 2036, will pave the way for a second phase to be brought forward. Building on the sense of place already established and the arrival of High Speed 2, phase two of the urban village can deliver circa 2,800 homes. The release of the land to accommodate this next phase will require multi-storey car parking. The delivery of the Grand Plaza can be aligned with the second phase of the urban village and infill

development at the Boulevard has the potential to be brought forward as demand arises in the market.

Public sector funding partners will play a central role in unlocking the full development potential of the Masterplan. This commitment is already being demonstrated by the work of the Urban Growth Company and the Combined Authority who are securing funding for infrastructure across the

Hub Area. The Urban Growth Company will continue to have a central role in coordinating this wider infrastructure investment and maximising the positive impacts from the arrival of High Speed 2.

The development at the NEC has the potential to deliver skills and job opportunities for the local population. This will be achieved through construction phases and occupation. Working with local partners can maximise these opportunities.



↑
Site as existing



↑
First phase of
the urban village



↑
Second phase of
the urban village



↑
The completed Masterplan

Imprint

Masterplan produced by NCL Development and Glenn Howells Architects.

With assistance from Mott McDonald, James Holyoak Sketch, CBRE, Gardiner and Theobald, Tetra Tech.

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