Milton Park Local Development Order
Design Guidance

December 2024

Vale of White Horse

For Information:

This Guidance specific to the Milton Park LDO area should be read in conjunction with other adopted local design policy and guidance.

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1. INTRODUCTION

Purpose

1.1 This Design Guidance forms part of the LDO. It provides high level guidance for implementation of high-quality future development within the LDO area. The context to this document is provided by the opportunity to maintain and enhance the high quality business environment at Milton Park for current and future tenants, respect neighbouring communities, including the villages of Milton and Sutton Courtenay, and to keep pace with the changing market for science and technology in the UK.

1.2 This guidance has been informed by the Milton Park Vision 2040 (the 2040 Vision), which has identified future development opportunities within the LDO area and the technical work undertaken which supports the LDO.

1.3 High quality design is not just about the buildings, it is the interaction of buildings, landscape, open space, function, and form. It also goes beyond simply providing a setting for people to work, into the creation of a community through choices of activities, events, mobility, and participation. A strong community is critical for Milton Park and one of the key components of a sustainable and successful future for Didcot Garden Town.

1.4 Milton Park is within the changing economic market of the Science Vale and is a front runner in the delivery of science and technology in the region. As such it need to be able to respond efficiently and effectively to the demands of a fast-changing industry as well as increasing awareness and demands for sustainable, environmentally conscious, and resilient design.

1.5 In addressing these requirements, the guidance is divided into three main parts:

- The overall Design Approach for the LDO area.
- General guidance applicable to the whole LDO area.
- Additional specific objectives for five identified neighbourhood character areas.

1.6 This Guidance specific to the Milton Park LDO area should be read in conjunction with other adopted local design policy and guidance and the development parameters and conditions set-out in the LDO.

Context

Planning

1.7 A simplified planning framework – the Local Development Order (LDO) – was first adopted for Milton Park in 2012. This Design Guidance updates and replaces the guidance adopted with the previous LDO, to reflect changing context in the Didcot area, changes in national and local guidance, other legislation, regulations and guidance and to reflect the future direction of the Park.

Site

1.8 Milton Park is located within the Science Vale, a cluster of the UK's premier research and science locations. It is less than 10 minutes bus ride from the Didcot Parkway train station. The journey between London Paddington and Didcot is approximately 36 minutes. It is 24 minute bus ride from Oxford City Centre.

1.9 There are ambitious plans for Didcot through its Garden Town Plan which will see additional houses and a complete transformation of the former Didcot Power Station site. This will change the context of Milton Park to include more accessible employment and residential opportunities in the future. To the immediate north there are the historic settlements of Milton Village and Sutton Courtenay and a Scheduled Ancient Monument (SAM OX250) known locally as Kelaart's Field.

Sustainable Travel

1.10 Milton Park is served by existing sustainable travel modes. Within the context of a growing awareness of imperatives for sustainable development and climate change, the sustainable travel options for Milton Park are continually being reviewed and improved.

1.11 The Wider Accessibility Plan identifies current travel service corridors and also new additions to the network that are planned by the Vale of White Horse and OCC in seeking to enhance connectivity and multi-modal choice. Existing services include:

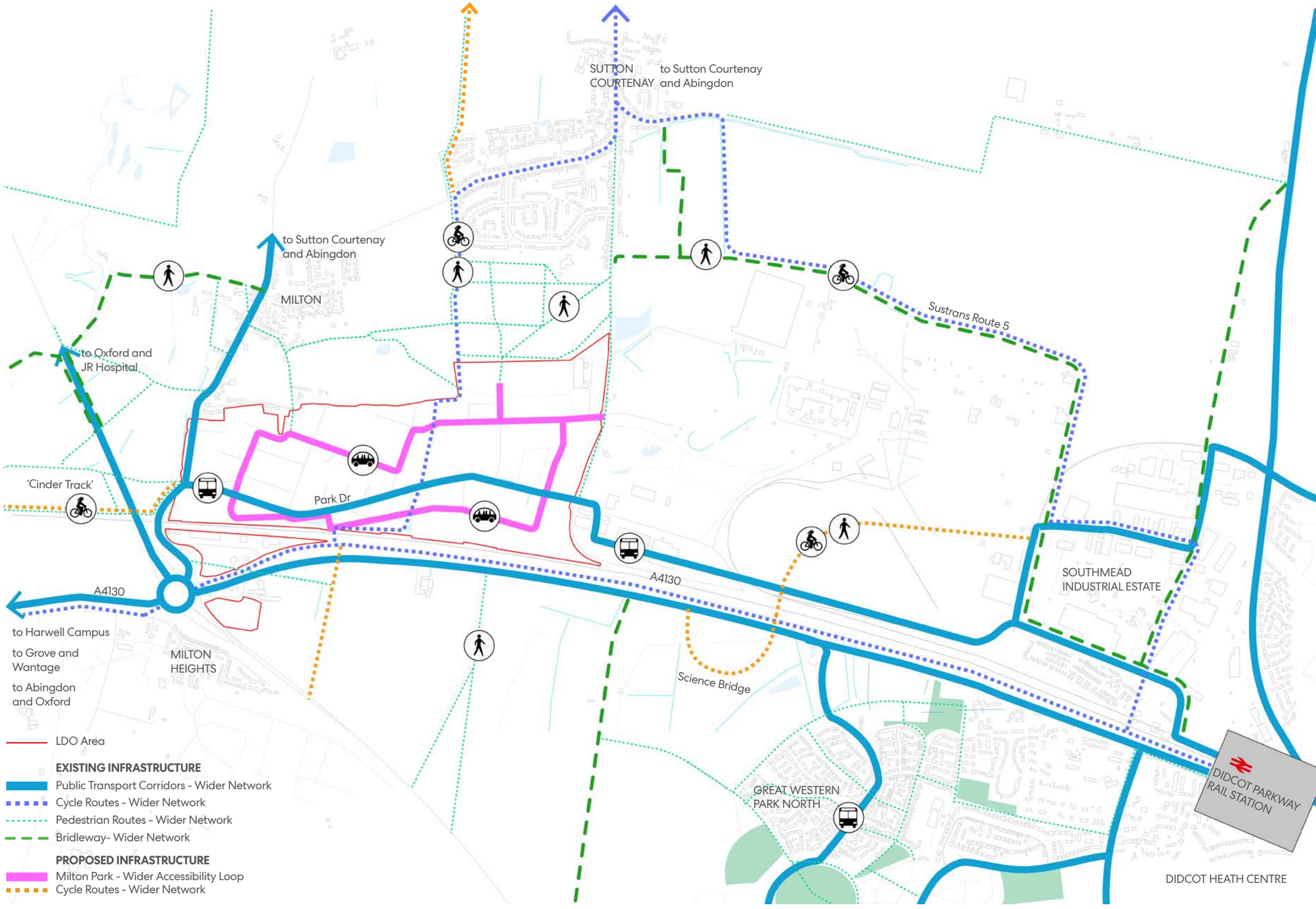
- A shuttle bus service to and from Didcot Parkway offers a frequent, low-cost service between 6am-11.30pm.

1.12 Proposed new infrastructure includes:

- Proposed Cycle Routes connecting to Abingdon and beyond Oxford
- Science Bridge strategic infrastructure over the railway
- Improvements to the 'cinder track' between Milton Park and Steventon to allow cycling (Policy DP 18a of the Local Plan Part 2).

1.13 Within Milton Park's ownership a coordinated approach to improving sustainable travel has been adopted which includes a connected Mobility Loop as a focus for future cycle and pedestrian improvement as well as autonomous vehicle trials.

1.14 Milton Park will provide financial contributions to assist in providing off road pedestrian and cycling links between Milton Park and Steventon via the 'cinder track' and off-road from Sutton Courtenay to Drayton.



Wider Accessibility Plan of Milton Park

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2. DESIGN APPROACH

2.1 The guiding approach set out in the 2040 Vision is to create a framework of walkable connections and development parcels for Milton Park within a framework of green and blue infrastructure comprising human scale street frontages and a network of linked open space. There will be a reduced emphasis on car parking and increasing opportunities for outdoor space ranging from plazas to natural habitats. There will be a reducing emphasis on parking and single occupancy vehicles as the Milton park Travel Plan measures continue to have a positive effect.

2.2 This guidance is intended to foster the continued delivery of new development to a consistently high standard and, where the opportunity arises, to improve the accessibility, permeability, and vitality of Milton Park to ensure it remains a thriving and dynamic business environment that retains and attracts quality companies.

Illustrative view of Milton Park in 2040

Source: Milton Park 2040 Vision, MEPC

Spatial Framework

2.3 The structure of Milton Park is provided by a combination of the existing buildings and the existing mature landscape. The spatial framework is a loose fit structure for the opportunities that will underpin the next generation of investment in Milton Park. The purpose of this structure is to ensure that future regeneration of the business park is well coordinated and will deliver multiple benefits to achieve sustainable development and a strong sense of place by creating opportunities for gateways, vistas, landmarks, and open space network. It also ties together the considerations of smart technology integration, sustainable construction, and site resiliency (its ability to adapt successfully to changing demands).

Development Parameters

2.4 This updated guidance has been informed by detailed assessments of key issues including landscape and visual impacts, biodiversity, transport, and heritage. The conclusions of this technical work have led to a refinement of the development parameters adopted with the LDO 2012, including adjustment of the building heights parameters, and requirement for enhancement of boundary landscaping.

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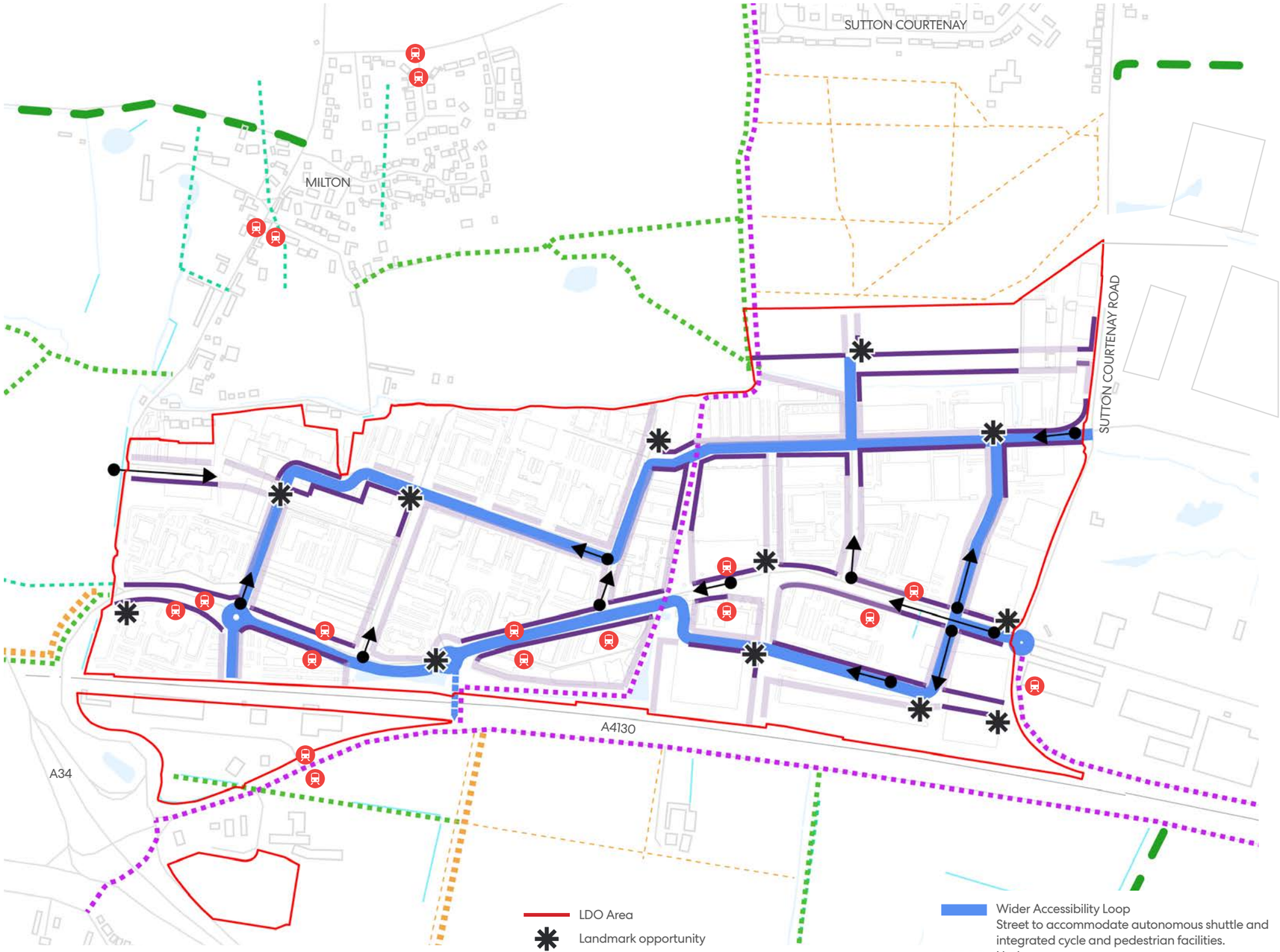

Spatial Framework

Source: https://www.cyclestreets.net/
Source: https://publicrightsofway.oxfordshire.gov.uk
Source: https://www.miltonpark.co.uk

Building Height Parameters

2.5 The building height parameters set the maximum height for buildings within the LDO area (see LDO Plan 3). This parameter identifies building height zones and does not represent the physical extent of development.

2.6 As recognised in the 2040 Vision, future growth is expected to be dominated by the science and technology sector, which is already very strong in the region as recognised by the Science Vale UK status. With respect to building height, this guidance is therefore influenced by current best practice in laboratory (lab) design.

Neighbourhood Centres Strategy

2.7 This guidance introduces the concept of 'neighbourhood centres'. These could provide a range of services and facilities which directly support the viability and sustainability of Milton Park and all who use it. Identification of neighbourhood centres also creates the potential for taller buildings as landmarks focal points aligned with important gateways and views within the business park.

2.8 Each neighbourhood centre will be different and greater detail on their character is provided in Section 3. In general, neighbourhood centres to the south of the Park will have greater levels of activity and to the north the centres will be smaller in scale out of respect for the adjacent residential/ more sensitive land uses. Neighbourhood centres are located with approximately 3-5 minute walking catchments (200-400 metres), determined to be a suitable experience for an easy lunchtime walk. However, they are not the only place that amenities can be located, and other long standing amenity locations and temporary locations will also be used to bring variety and activity throughout the whole Park.

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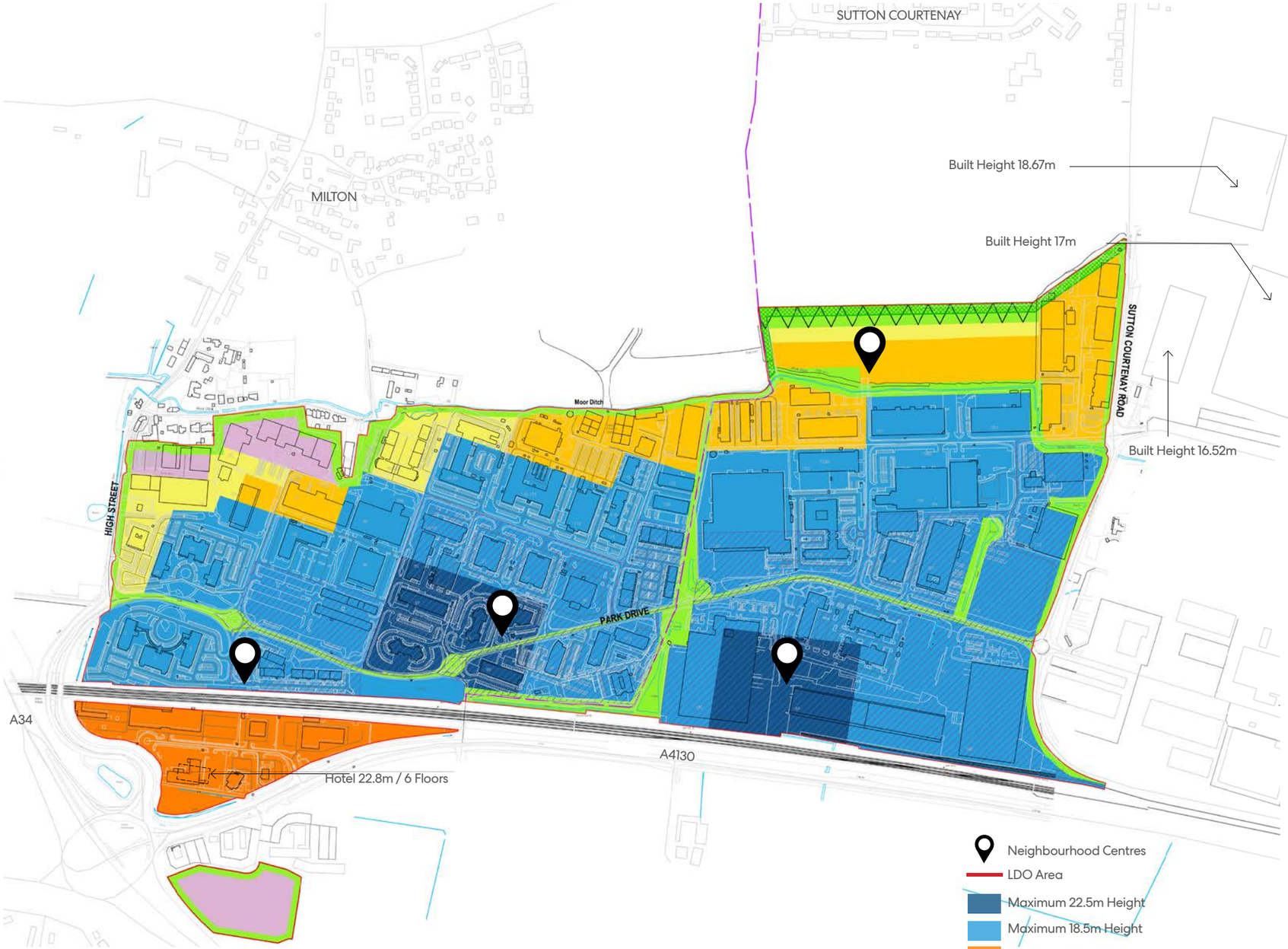


LDO Plan 3 - Building Height Parameters Plan (with annotations)

Typical Floor to Floor Heights

2.9 The Vision 2040 sought to plan for the future of Milton Park as a Science and Technology centre of excellence within the region. It therefore took the approach with building massing that it should meet with current best practice in laboratory (lab) design. At a general level this means securing the right floor to floor heights to accommodate heating, cooling, and ventilation and clear heights for robotics that are increasingly becoming an integral part of modern lab environments.

2.10 The sections below show typical assumptions for lab buildings and have informed the height parameters set by the LDO.

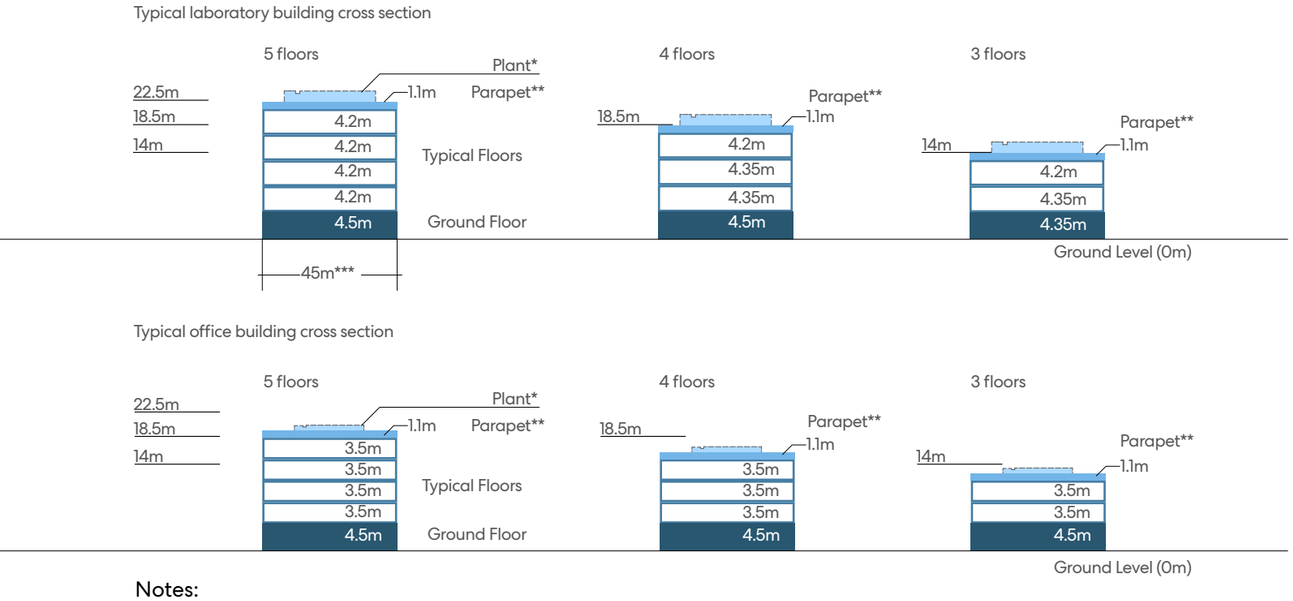
2.11 Typical required lab floor-to-floor heights vary from 4m to 4.5m depending on the type of scientific use and the building specification. Typical required office floor-to-floor heights are assumed as 3.5m.

Height Variation

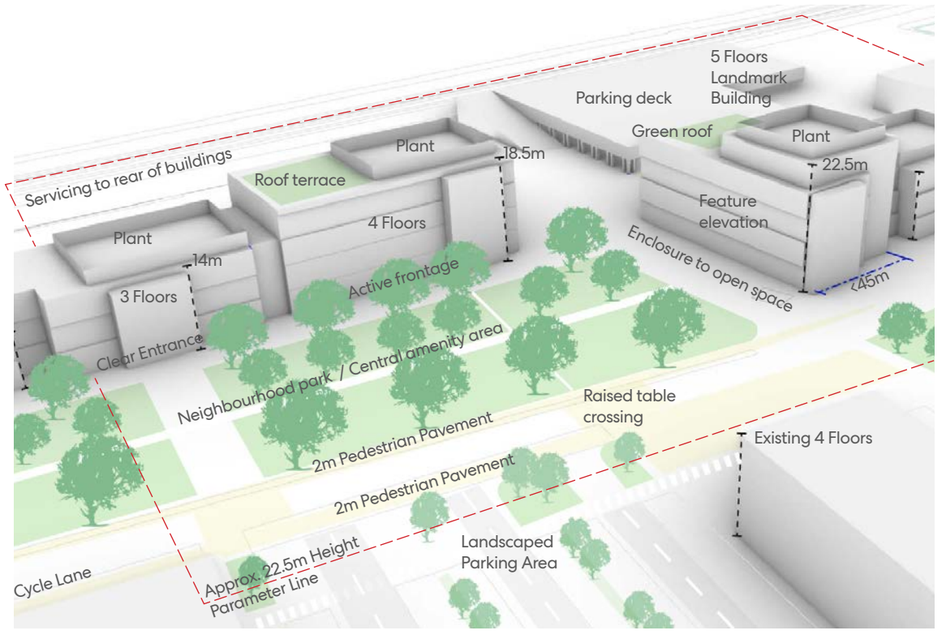
2.12 It is not envisaged that all buildings will be constructed to the maximum permissible height of the parameters. There should be variation based on use type, function, location and demand at time of construction.

2.13 Each development should consider its immediate context within the Spatial Framework Plan. Where appropriate, taller buildings should be used in overlooking public space and at key intersections within the neighbourhood centres.

Height Parameters



Notes:
Plant requirement will vary based on building specification and use. Typical set-back of a minimum of 2m from the primary building facade.
**Parapet height included in parameter and sized to allow roof level access for plant servicing and PV maintenance where needed.



Illustrative neighbourhood centres massing, activity mix and height/massing variation.

2.14 An increase in height in specific areas will add character and interest and will support amenity facilities through opportunities of localised increase in employee density.

2.15 The illustrative neighbourhood centre identifies that within the 22.5m height parameter there are roads, open spaces, and parking which combine to both make the neighbourhood centre function and also mean the overall density of these areas will remain in keeping with the rest of Milton Park. The building height will vary to create interest with an uplift in height for landmark building locations.

2.16 Further detail on roof plant design is included in Section 3: Roof Level Mechanical Equipment.

Massing

2.17 Proposed building layouts should avoid the appearance of an uninterrupted mass of development through orientation and articulation of massing. Buildings should conform to a maximum length of 120 metres to align with the walkable grid of parcels and streets within Milton Park.

2.18 As illustrated above, developments should introduce variety in building forms, projections and set-backs, to create a variable, not monotonous, built edge with buildings being positioned to avoid an appearance of continuous mass of development through orientation and articulation of massing and scale. Appearance of continuous building frontages should be controlled through the use of landscape setting and open space between adjacent buildings.

3. GENERAL GUIDANCE

3.1 This section deals with design guidance which is applicable across the entirety of the LDO Area (LDO Plan 1).

Movement

3.2 Milton Park is a private business estate, the vast majority of which is in single ownership. There is opportunity to expand upon the significant measures already in place to manage movement within the park and encourage sustainable travel to and from the park.

3.3 Places need to be walkable to create opportunities for social interaction and collaboration. Creation of walkable and cycle friendly streets encourages sustainable forms of public transport and movement. Pedestrian paths, crossings, lighting, and street furniture (benches and bins) should be prioritised in development plots and the public realm. Design of plots should create good connections to existing internal (within the Park) and external cycle and footpath networks helping to deliver the objectives of the Travel Plan to further encourage behaviour change away from car journeys.

3.4 Cycle and pedestrian infrastructure, including links to the local cycle network beyond Milton Park which connect to the Railway Station and to residential developments to the south and north as far as Oxford, should be maintained and improved by the highways design using current adopted Oxfordshire County Council and Vale of White Horse District Council (Local Planning Authority) standards. Additional future connections out of Milton Park to projects such as the Science Bridge should be prioritised.

3.5 Bus stops and other facilities to support sustainable travel should be given priority locations, close to building entrances to enhance access to public transport networks and connections to nodes outside of Milton Park.

3.6 It is recommended that new development plots do not exceed 150m in street length. Where they do intermediate footpaths could be provided to promote walkability.

3.7 Provision should be made for efficient and unobtrusive servicing arrangements allowing delivery flexibility, but with consideration for future consolidation of deliveries within neighbourhood centres or parking structures.

3.8 Electric vehicle charging stations should be integrated within the parking structures or 'compressed' parking locations (e.g. Parking decks or automated parking areas) providing efficient use of land and encouraging moves toward sustainable travel options. The number and type of EV charging points should respond to current technology and demand at the time of implementation and in response to the Annual Travel Survey following Building Regulation Requirements and any adopted standards at the time of implementation.

3.9 Vehicle speed within the park should be controlled at 20 MPH to ensure maximum safety for all road users. Techniques can be used to reduce vehicle speeds including: narrowing down the carriageway, use of planting and build outs to incorporate street trees, change of colour/ materials, use of shared surfaces, varying the alignment of the vehicular route and use of tight junction radii.

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Creative pedestrian environments and pedestrian crossings can encourage walking

Street Design

3.10 Raised tables and shared surfaces should be permitted in order to rebalance the prioritisation from traditional car focussed design to walkable pedestrian prioritised environments.

3.11 For new street construction and upgrades, pavements at a minimum width of 2.0 metres, or 3.0 metres if combined pedestrian and cycle use, should be provided on both sides of the street on the Loop and on at least one side on others. Pavements should be continuous and meet the needs of all users (including visually impaired) with dropped curbs and space for wheelchair use.

3.12 A consistent baseline palette of materials for road construction should be used as standard. However, the ability to introduce creative and exemplary design and variety to add character is encouraged.

Primary and Secondary Frontages

3.13 Buildings should be positioned to define and enclose streets and spaces aiding the creation of character and places for people.

3.14 Buildings should be positioned to have entrances with convenient access from pavements and other pedestrian paths.

3.15 The Loop should be fronted by main entrances/front doors creating 'Active frontages'. These frontages should be articulated through use of materials and detailing to create a human-scale to the architecture.

3.16 Buildings should avoid blank facades with no windows or visual interest facing open space or streets forming the Loop.

3.17 Buildings should ensure that pedestrian links are over-looked by development to allow natural surveillance and aid safety and security.

3.18 Building set backs from the street should allow the continued landscaped appearance of Milton Park combining street trees with trees within development plots.

3.19 Secondary streets should provide alternative access point as part of the pedestrian and cycle network as well as servicing and any on-plot parking access.

3.20 There should be distinction through landscaping boundary and surface treatment between the public streets and semi-private areas within plots.

Amenities Provision

3.21 Neighbourhood centres should be designed to add to the experience for users of Milton Park, including through provision of outdoor seating, covered areas for outdoor meetings, and other amenities.

3.22 In undeveloped plots, neighbourhood centres, or plaza space hard landscaping suitable for social events, food trucks and other activities could be incorporated as part of the public realm network.

3.23 Open Spaces of a suitable surface can be used for temporary location of moveable amenities, such as food trucks, or temporary pop-up events.

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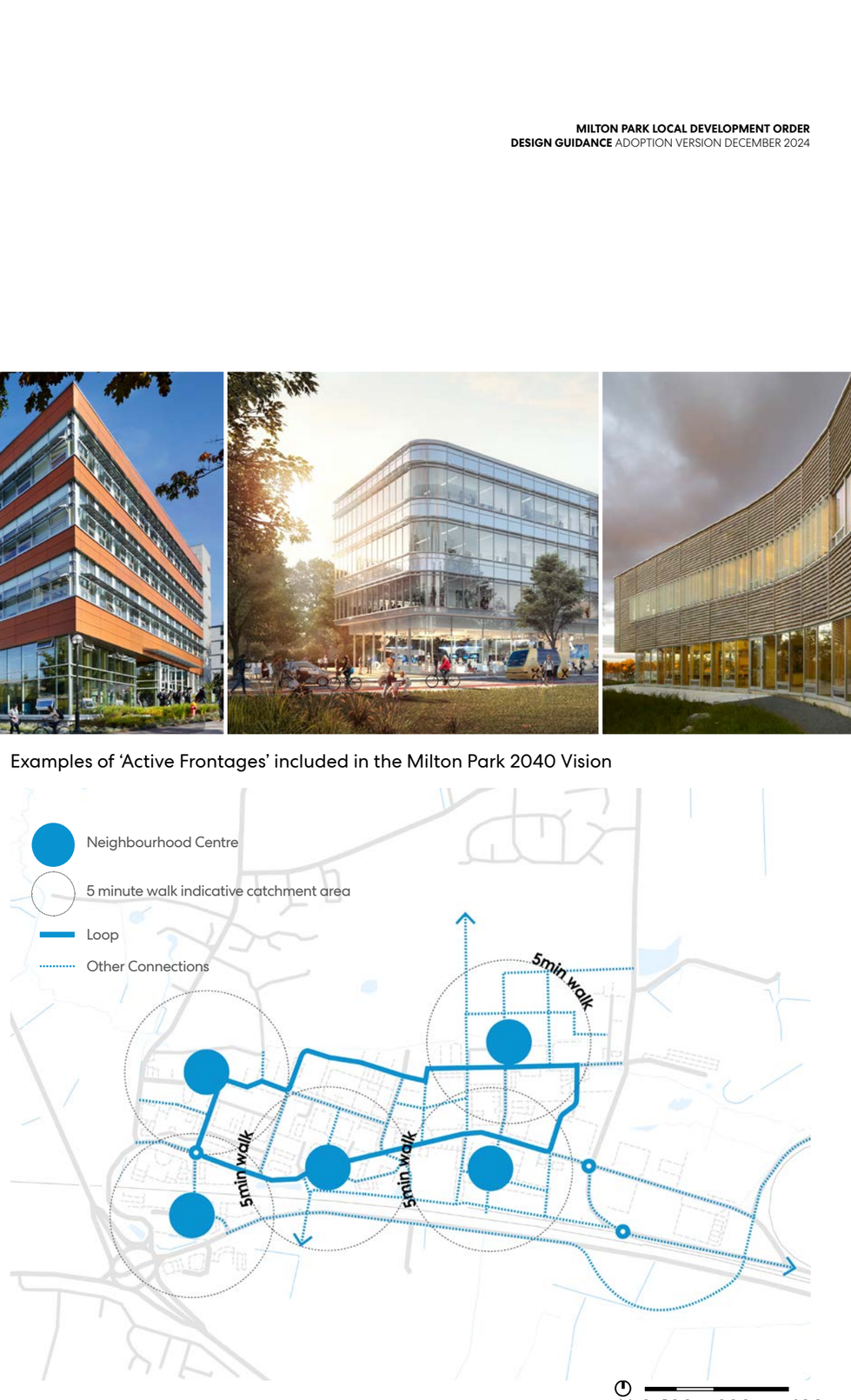
Examples of 'Active Frontages' included in the Milton Park 2040 Vision



LDO Neighbourhood Centres and convenient walking catchments

Architecture

3.24 The architecture of buildings within Milton Park should be designed alongside their landscape settings to develop sustainable and attractive places for people.

3.25 Architecture of buildings within Milton Park contributes to the overall character of the Park as a globally recognised Science and Technology Park. There should be a consistent high quality of design drawing from the character of Milton Park but with more prominent buildings, for example in the neighbourhood centres or on corner plots, to have more expressive design features (for example, fenestration detailing, facade systems, shading louvre, brickwork or material variation etc) to aid legibility and sense of place.

3.26 All buildings should be of high quality design and should include innovative sustainable features. They should be of simple form and contemporary design, with larger footprint buildings broken down into geometric volumes, vertically or horizontally depending on the site, to reduce apparent bulk. Articulation of the ground floor and attention to detailing that provides users with a human-scale interest and coherence between buildings should be adopted.

3.27 Main entrances to buildings should be clearly expressed, accessible, and identifiable from the pedestrian and cycle network.

3.28 Ground floor levels should create opportunities to create interaction either physically or visually between indoors and outdoors for the benefit of activating the street and open spaces and to facilitate wellness through greater interaction with the natural landscape of Milton Park. This can be achieved through including a greater amount of openable doors at ground floor and/or consideration of the position and size of fenestration.

3.29 Architectural designs should allow for future sub-division of units and adaptable internal configurations to prolong the building life and opportunities for repositioning of uses.

Taller Buildings

3.30 Taller buildings are defined in the LDO as buildings above 18.5m (when measured from the existing ground level (AOD) (LDO Plan 3 Building Heights).

3.31 These buildings play an important role in adding character and interest to neighbourhood centres within Milton Park.

3.32 Due to their increased scale, careful design consideration should be given to the upper floors of the building as well as proportions and colour tone of the design to break up the mass of the building both vertically and horizontally. A clear base or ground floor level, middle level, and top level of the building should be created within the facade treatment.

3.33 Greater design articulation, including feature facade design, should be given to facades visible from public streets and open spaces and from outside of the park in co-ordination with consideration of orientation of buildings for passive solar gain.

3.34 Details of the elevation treatments of Taller Buildings need to be submitted for approval by the Local Planning Authority in accordance with the LDO conditions.

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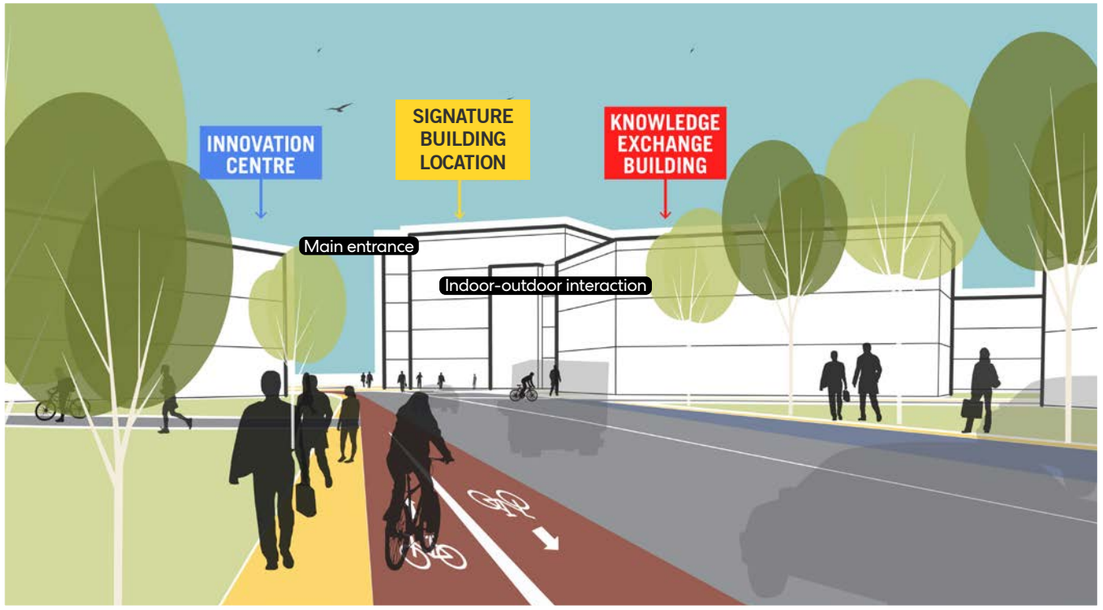

Illustrative diagram of buildings addressing the street and outdoor spaces

Roof Level Mechanical Equipment

3.35 Where mechanical equipment, ventilation exhausts, renewable energy generating plant e.g. solar panels, and air-conditioning components are required positioning should minimise their visual appearance from open spaces and from sensitive long views.

3.36 Mechanical plant screens for both visual and noise attenuation should enclose any proposed roof level plant equipment allowing it to read as an integrated part of the building design, in materials and colour.

3.37 Mechanical plant enclosure will be permitted with a typical set-back of a minimum of 2m from the primary building facade and a maximum height of 3m from ridge line.

3.38 Flues and exhausts should be located a sufficient distance from accessible roof areas to allow safe dispersal of any fumes.

3.39 Refer to LDO Plan 3 for information of where mechanical roof plant must be included within the building height development parameter.

Sustainability Design Objectives

3.40 Development plots and new buildings should not be considered in isolation but in the context of adjacent plots and buildings and other notable features such as green space and water features, and the resources provided by the whole of Milton Park.

3.41 New buildings must be designed in accordance with the sustainable construction and energy efficiency targets set out in the LDO conditions.

3.42 Building design should prioritise built form and envelope sustainability (e.g. airtightness, insulation, ventilation) as well as considering modern methods of construction and low energy building services.

3.43 Developments should also provide innovative approaches to addressing climate change, for example consider implementation of:

- Air Source heat pumps
- Ground Source heat pumps
- Photovoltaics (PV) Panels
- Solar Thermal
- Biomass Heating
- Excess heat supply for reuse on or off-site district heating

3.44 Solar orientation should be used to guide the design of the building facades to maximise natural light into the buildings and reduce the energy required to cool the building.

3.45 Roofs should be carefully considered to maximise their potential to include green and blue roof systems, biodiversity, renewable energy and amenity space.

3.46 Material selection should take account of embodied carbon in construction for all stages in the life cycle of the material. Consideration should be given to reuse of materials strategies for future development. New build projects should, where possible, source materials from the local area to reduce the demand for and impact of new building materials.

3.47 Where elements are included, such as renewable technologies, shading, chimneys or flues, these elements should be designed as an integral part of the architecture of the building.

3.48 Where it is not feasible for inclusion of new technologies, the infrastructure capacity or service runs should be provided as part of the future-proofing package in the building design.

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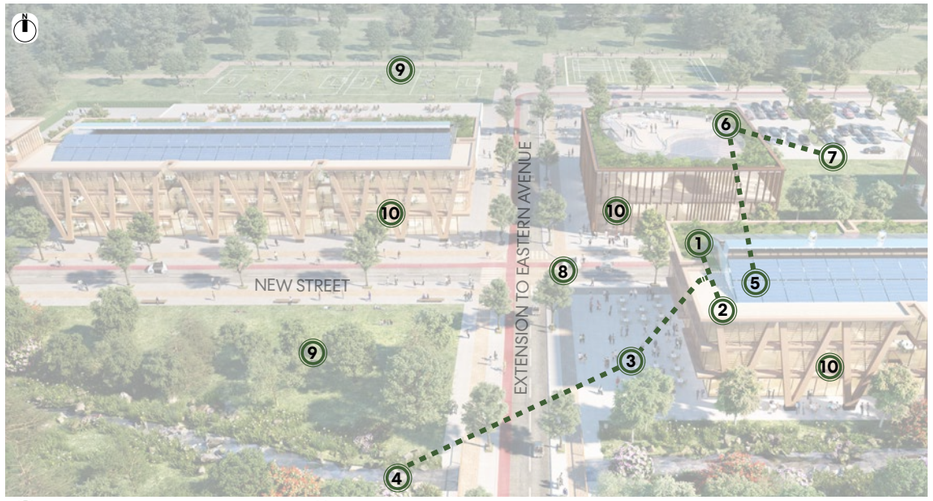
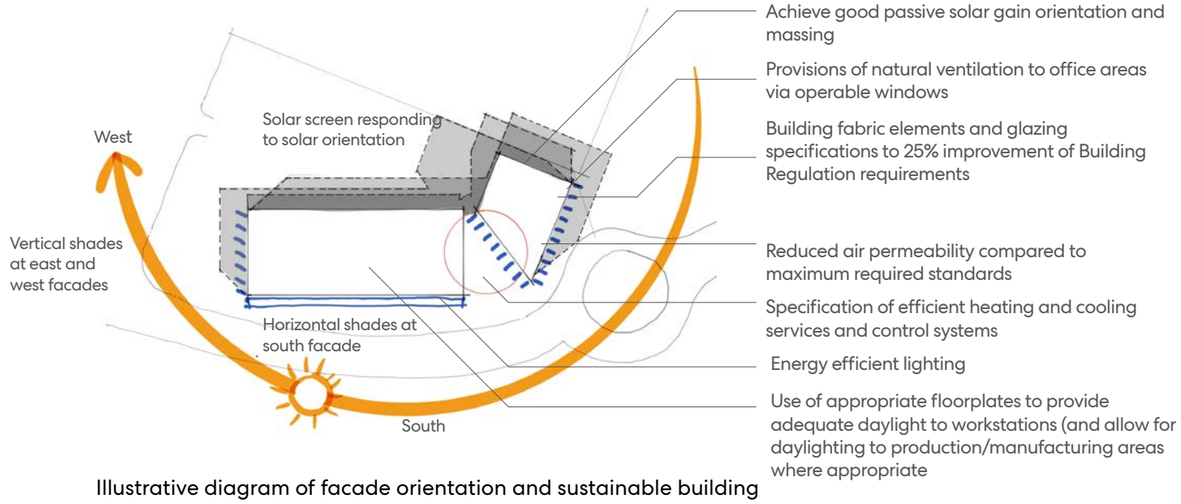


Potential inter-related sustainability considerations (shown on illustrative concept render from The 2040 Vision)



Illustrative diagram of facade orientation and sustainable building design considerations for future development

Landscaping Strategy

The Existing Landscape

3.49 The landscape is a much loved and valued resource by Park users. It is maintained and managed via a robust specification that informs a specialist landscape contractor who operates with a permanent team of operatives full-time on the site. The contract is run by a dedicated manager, supervised by a professional landscape architect and overseen by the Park's Facilities Manager.

3.50 The landscape of the public realm and the majority of individual plots is maintained by the landscape contractor to a high standard. There is a continual programme of investment and improvement year on year. Individual plots are also improved and upgraded from time to time.

New landscape

3.51 As development plots are either refurbished or redeveloped, new landscapes are designed and implemented to take on board the required high standards of design, functionality and sustainability.

3.52 Key components of this process include:

- Designing inclusive and accessible landscapes in line with this guidance and other adopted design guidance. This would include cycle provision within an overall strategy on the park
- Retaining trees where possible and replacing trees lost on the park in line with the Tree Management Framework
- Protecting existing trees during development with appropriate best practice
- Planting new trees to best practice using appropriate soil volumes for the tree
- Planting diverse species to appropriate ultimate canopy sizes for their locations
- Focussing on the planting of pollinating plants as part of any planting design
- Adapting planting design with climate change
- Providing green roofs and walls where possible and practical on buildings and structures.
- Providing sustainable drainage solutions for all developments either via SUDs, swales or both in accordance with the LDO conditions.
- Requirements for defensible space and planting to temporary residential plots, again to demarcate the change in ownership from public to private or semi-private space, and to afford protection to easily accessible ground floor windows. Defensible space and planting as a buffer along walls also reduces opportunities for loitering and crime such as graffiti.

3.53 For the Landscape Zone (as defined on LDO Plan 2 and LDO Plan 3) and the north and west park boundaries provide native mixes of planting where appropriate using indigenous species in swathes of between 10 and 15m wide in accordance with LDO Plans 2 and 3 and as development plots come forward for development

3.54 Development within Milton Park should also be designed in awareness of the habitat and tree surveys conducted regularly and the Tree Management Framework.

Tree Buffers - Green Boundary

3.55 Tree buffers of between 10 and 15m (in accordance with the supporting LDO LVIA and LDO Plans 2 and 3) will be included on the northern boundary of Milton Park to soften the appearance of the park in long distance views, including views from within and from the perimeter of the Milton Conservation Area. Part of the Landscape Zone on the northern boundary, adjacent to the Conservation Area, provides a substantial opportunity for tree buffers and planting in excess of 15m.

3.56 Development plots which include areas of Landscape Zone (as show on Green Infrastructure Network Plan) should implement boundary planting as plots come forward for development.

3.57 There is particular opportunity for a continuous strategic Landscape Zone (see the Landscape Zone on LDO Plans 2 and 3) on the northern boundary as development plots become available.

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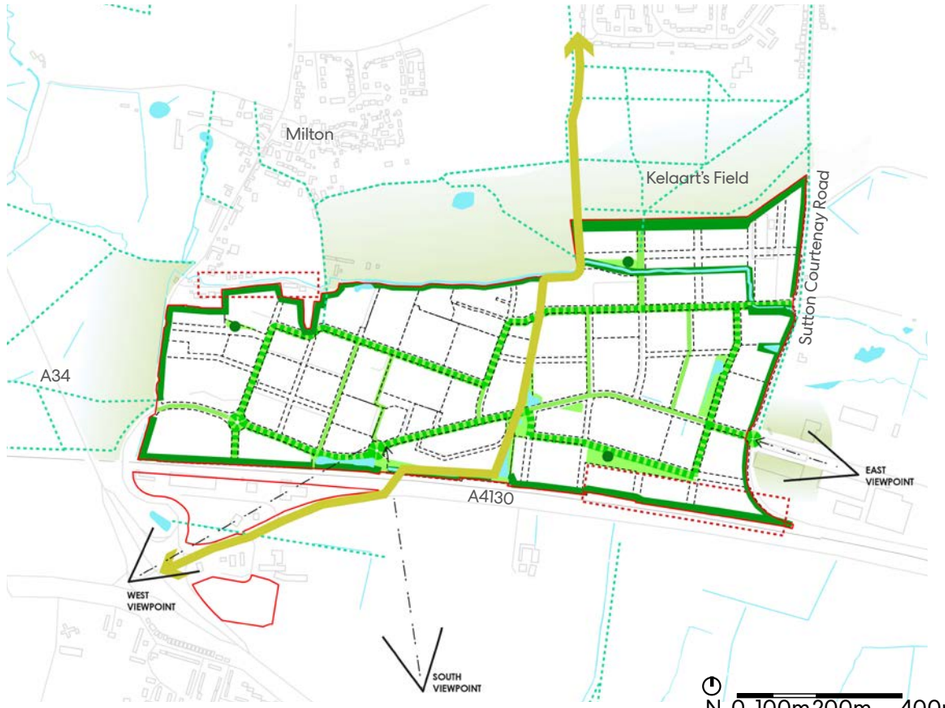


- Received from MEPC on 21/11/2022

Green Infrastructure Network

3.58 The existing character of Milton Park is substantially defined by its mature landscape (see the Landscape Zone on LDO Plans 2 and 3). This has increased through recent work to make the landscape more accessible to Park employees and the wider community.

3.59 The design approach of future developments through this LDO should seek to further improve the public accessibility of the green space network, creating usable spaces to rest, gather, and interact whilst also adding to biodiversity.

3.60 Proposed landscaping to be informed by good green infrastructure design as advocated in policy and for instance Building with Nature standards, to maximise their potential benefits for wellbeing, water and wildlife to achieve overall biodiversity net gain.

LDO Green Infrastructure Network

- LDO Area
- Green boundary
- Green corridor / cycle Route
- Enhanced landscape and new planting along main loop
- Enhanced open space
- Existing retained soft landscape, outside of LDO boundary
- Lagoons
- Ditch / Water Feature
- Flood risk improvement area
- Potential for new open space

Development Plot Design

Hardscape

3.61 Hardscape surfaces should, where practical, be of porous design to reduce surface water run off and should be combined with other sustainable drainage solutions where space will allow to enhance biodiversity.

3.62 High quality design and materials should be used to minimise maintenance requirements and increase potential for long term reuse and recycling.

3.63 Variation in types of hardscape should be used to help with legibility of movement within and between plots.

Tree Planting

3.64 Development should maintain existing levels of tree canopy cover and extend cover as opportunities arise. Space for tree planting should be provided to continue the tree-line character of Milton Park.

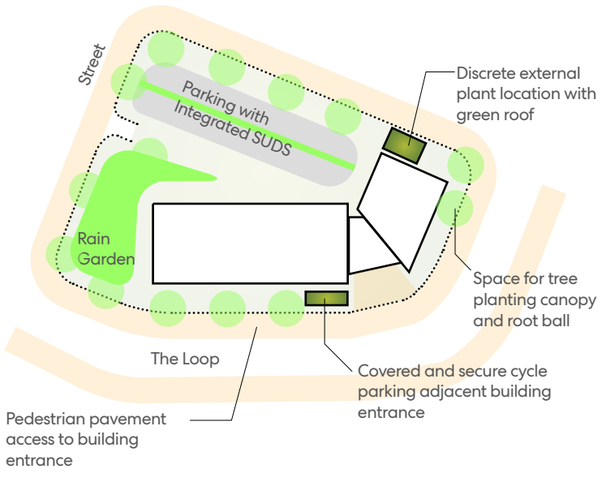
3.65 Where new open space is created, additional trees should be planted using locally prevalent native species. Tree planting should be in accordance with the Tree Management Framework which aims to reflect the wider surrounding landscape and achieve a mix of 70/30 native and non-native.

3.66 Landscape planting associated with individual units should seek to provide natural shading for outdoor areas, streets, and parking, particularly where the soft landscape and tree canopy can reduce surface water run-off and assist in cooling of southern building facades.

3.67 In sensitive locations, for example where development plots are adjacent to neighbouring residential areas, additional tree planting may be used to soften the appearance of existing and future built form in views.

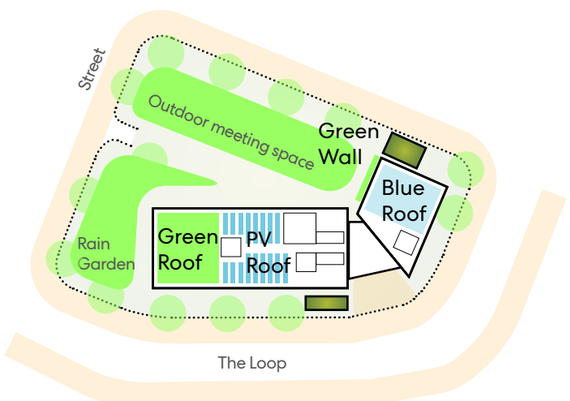
1 - TYPICAL PLOT DESIGN

Achieve an efficient use of land, without compromising landscape character of Milton Park



2 - INCREASE BIODIVERSITY OVER TIME

Increase biodiversity by removal of parking spaces into consolidated locations. Add bioswales to clean surface water run-off within increase outdoor amenities space. Include sustainable building technologies including green roof, blue roof, and renewable energy generation.



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Design and Flood Risk

3.68 Plot designs should incorporate Sustainable drainage systems, swales, permeable paving surfaces, rain garden and integrated blue and green roof and wall systems within building design in accordance with the LDO conditions.

Biodiversity

3.69 The LDO includes a Biodiversity Strategy to deliver a net gain in biodiversity to be in conformity with national and local planning policy. All new development will require a plot specific Biodiversity Strategy and be required to achieve a minimum of 10% biodiversity net gain (or any adopted requirement which supersedes 10%). This is secured by the LDO conditions.

Protected Sites

3.70 Kelaart's Field to the north of the site boundary is a proposed Local Wildlife Site (pLWS) designated for its botanical interest. This will be retained and brought under-management as part of the Biodiversity Strategy in order to ensure it is maintained in its current condition and continues to support a diverse grassland sward and associated fauna including reptiles and birds.

Habitats

3.71 Habitats of the highest ecological importance, namely Moor Ditch, and the other waterbodies, as well as hedgerows are a focus for retention and enhancement to contribute towards retaining and improving the ecological interest of the site and achieving biodiversity net gain. All development proposals should ensure a 10m buffer between development and Moor Ditch.

3.72 Future development should seek opportunities to create and enhance the on-site biodiversity network through the provision of green roofs, green walls and on the ground habitat creation appropriate for the existing surrounds including Sustainable urban drainage (SuDs), neutral wildflower grassland, amenity grassland and ornamental planting, waterbodies, hedgerows, trees and mixed scrub which will contribute to achieving net gain. This would be measured using the Natural England Biodiversity Metric and will be achieved through provision of on plot habitats in the first instance, then through strategic landscaping undertaken across the wider LDO area or where neither of these are possible through financial contributions for off-site schemes. This is secured by the LDO conditions.

Fauna

3.73 The proposals should seek to contribute to local strategies including biodiversity action plans through the provision of bat and bird boxes on suitable retained trees and/or proposed buildings creating additional habitat for these species.

3.74 Provision of reptile hibernacula should be considered for plots on the northern boundary to the south of Kelaart's Field to provide additional habitat for the known population of common lizard.

The "Bee House" Collaborative Workspace. Wildlife friendly landscaping as part of design proposals at 140 Eastern Avenue in Milton Park (from miltonpark.co.uk/bee-house)

Illustrative impression of potential landscape treatment to Moor Ditch within Milton Park North Neighbourhood (from Milton Park Vision 2040 Report)

Lighting

3.75 Street lighting and lighting from buildings should minimise light pollution and potential disturbance to sensitive areas of identified wildlife habitat in accordance with the LDO conditions. Lighting must be considered holistically with tree planting to avoid conflict between trees and lighting.

3.76 Creative, artistic, and attractive lighting should be integrated into neighbourhood centres to add character and identity, particularly within and around open space and plazas supporting prolonged use in winter months.

3.77 Lighting should provide safe and secure pedestrian and cycle movement particularly in winter months to improve sustainable travel uptake.

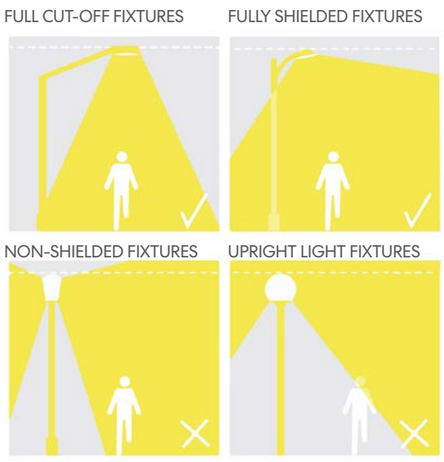
3.78 Internal lighting design be energy efficient and timed to turn off when not in use.

3.79 All lighting proposed on new development plots that has the potential to impact upon bat commuting and foraging corridors should be in line with the "ILP Guidance for bats and artificial lighting in the UK 2018' (refer to the supporting Biodiversity Strategy and Artificial Lighting Impact Assessment and the LDO conditions).

3.80 Illuminance along the Moor Ditch corridor should not exceed 1 lumen per sqm.

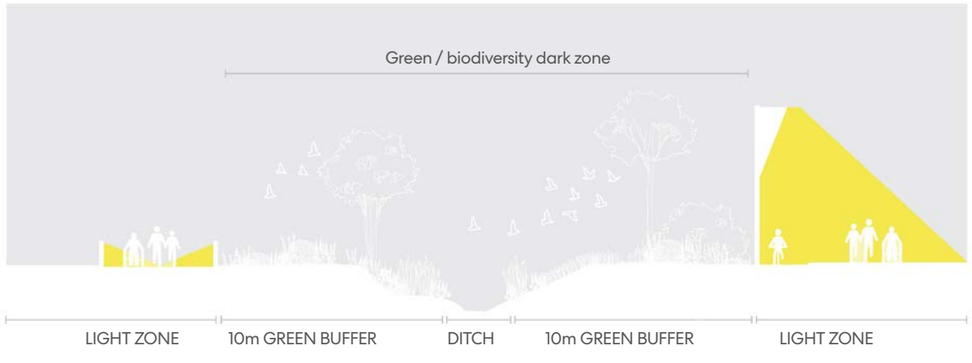
3.81 All artificial lighting, including aesthetic lighting should be designed to prevent glare to road users, with specific care given to areas where pedestrians are likely to be.

3.82 Cycle storage, EV provision, car parking, bus stops and seating areas should be adequately illuminated to ensure the safety of users during hours of darkness.



Illustrative guidance on street lighting type

Illustrative guidance on lighting at Moor's Ditch



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Parking locations

3.83 Limited parking in small forecourts can be provided for visitors and disabled parking where these are not dominant in the street scene.

3.84 Surface parking should use a simple palette of materials and integrate porous paving, sustainable drainage, and landscape.

3.85 Surface parking should include integrated landscape and trees, including Sustainable Drainage.

3.86 Surface parking should be reduced as development plots come forward and some may be relocated to consolidated parking locations with parking decks. Decked parking should be a maximum of 3 storeys in height (ground + 2 floors), This could include slightly sunken ground floor parking. The ground floor of decked parking shall be well lit taking account of Park Mark Standards.

3.87 Electric Vehicle (EV) charging must be provided in accordance with the LDO conditions. Sustainable energy options, including solar car parks and canopies to provide shade and shelter as well as energy generation should be investigated as technology in this area advances.

Cycle Parking

3.88 Cycle infrastructure and pavements should be provided in any new street construction in accordance with adopted parking standards. Provision of E-bike charging points is encouraged.

Existing screened Deck parking within Milton Park

3.89 Covered and secure cycle parking should be positioned adjacent to building entrances in line with the recommendations of Secured by Design.

3.90 A minimum of 10% E-bike charging should be provided for new building development.

3.91 Each development plot will provide shower and changing facilities on site unless this is not appropriate for the permitted use.

Service Areas

3.92 Service yards, staff car parks, decked parking areas, and refuse and storage structures should be screened either by buildings or planting from primary streets.

3.93 Servicing and emergency vehicles should be able to manoeuvre within and between all development plots, load and unload with ease and without inconvenience to other site areas. Parking for service vehicles should normally be located to the side and rear of the building only.

3.94 Services such as sub-stations, utility boxes, should be integrated into plot design and should not conflict with access, drainage, or landscape design.

Bin Stores and Fencing

3.95 Recycling and refuse facilities should be conveniently located for the users and also for the efficient removal of the materials by collection vehicles as part of an integrated plot layout and building design. These facilities should not be in plain sight of open space areas or primary streets but should be overlooked by rooms in the proposed building that the refuse facilities are associated with.

3.96 Fencing along boundaries should not normally be positioned forward of any landscape boundary planting.

3.97 Boundary fencing to the side or rear of plots should be a maximum of 2.0 metres high unless the functional security requirements require otherwise.

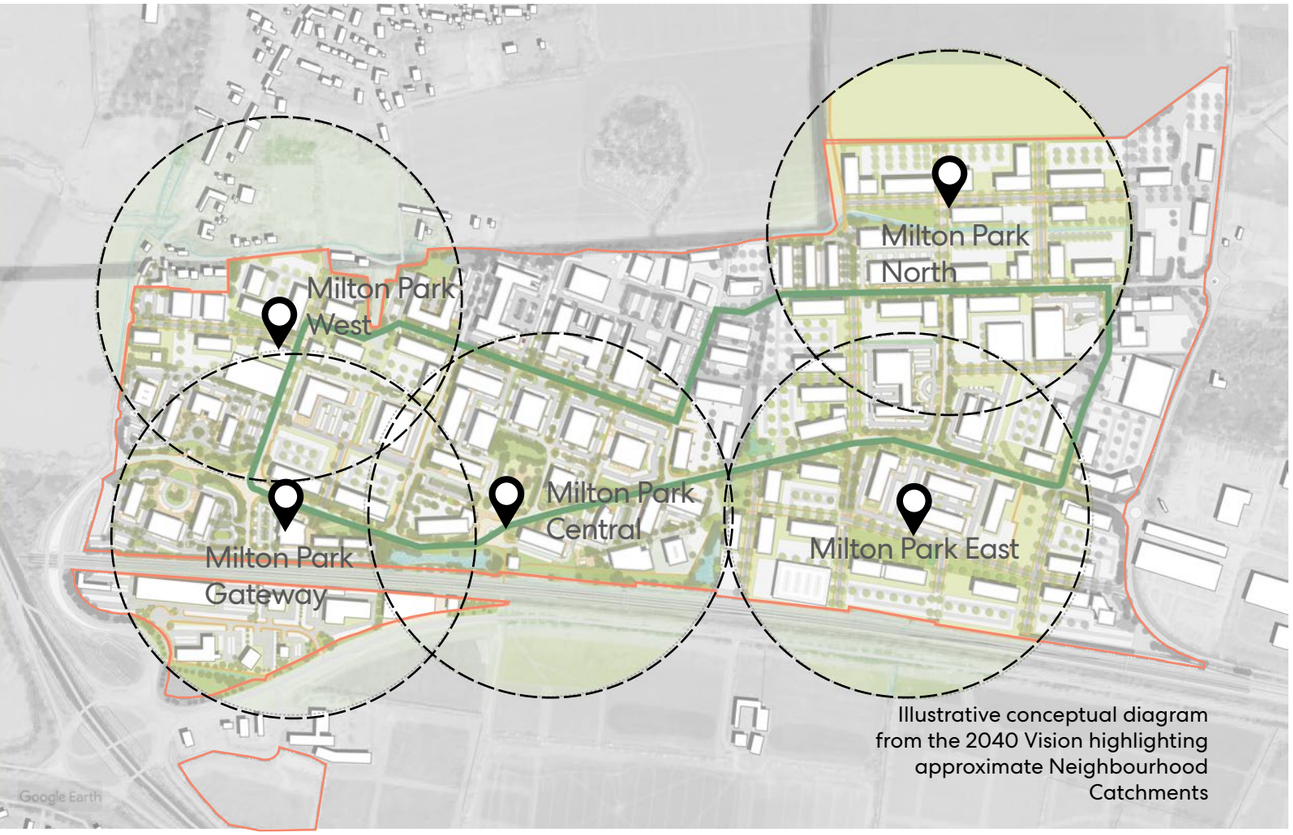
4. NEIGHBOURHOOD SPECIFIC GUIDANCE

4.1 This section provides additional guidance specific to certain broad neighbourhood character areas within Milton Park.

4.2 Five broad character areas have been identified. These are:

- Milton Park Central,
- Milton Park West,
- Milton Park Gateway,
- Milton Park East, and
- Milton Park North.

4.3 These character areas correspond to the identified neighbourhood centres. The character areas do not have specific defined edges recognising that they should blend into one another. They will overlap, evolve and change with time leading to a richer public realm and built environment and improved experiences for users. They operate within the constraints of the LDO zones and development parameters but do not line up with the zones exactly, instead they represent catchments of walking distances centred upon neighbourhood centre location(as described in Section 2).



Illustrative conceptual diagram from the 2040 Vision highlighting approximate Neighbourhood Catchments

Satellite image source: Google Maps, © 2022 Google, Image Landsat / Copernicus / Maxar Technologies

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Milton Park Central

4.4 Milton Park Central covers the central section of Park Drive around 99 Park Drive, which is already one of the most active locations within Milton Park.

4.5 This location is also a key gateway into Milton Park for pedestrians and cyclists through the railway underpass. This connection is likely to be used increasingly more in the future strengthening the activity within and through this area, as part of the future growth within Didcot Garden Town Plan.

4.6 Additional features already support this location, with the community allotment beds and the lake trail walk increasing the range of amenities.

Design objectives

4.7 In response to the role of this neighbourhood at the centre of the park, the LDO parameters permit buildings of up to 22.5m in this location.

4.8 Landmark buildings should align with views along Park Drive.

4.9 Buildings should be positioned to provide visible entrances to Park Drive with parking to the rear changing the character of Park Drive to become a tree-lined street fronted by building enclosures.

4.10 Street layout should encourage prioritising pedestrians and cyclists. Widened pavements (2.0m or 3.0m where it includes a cycleway) and gradual transition to a greater use of hardscape would be appropriate in the centre of the character area.

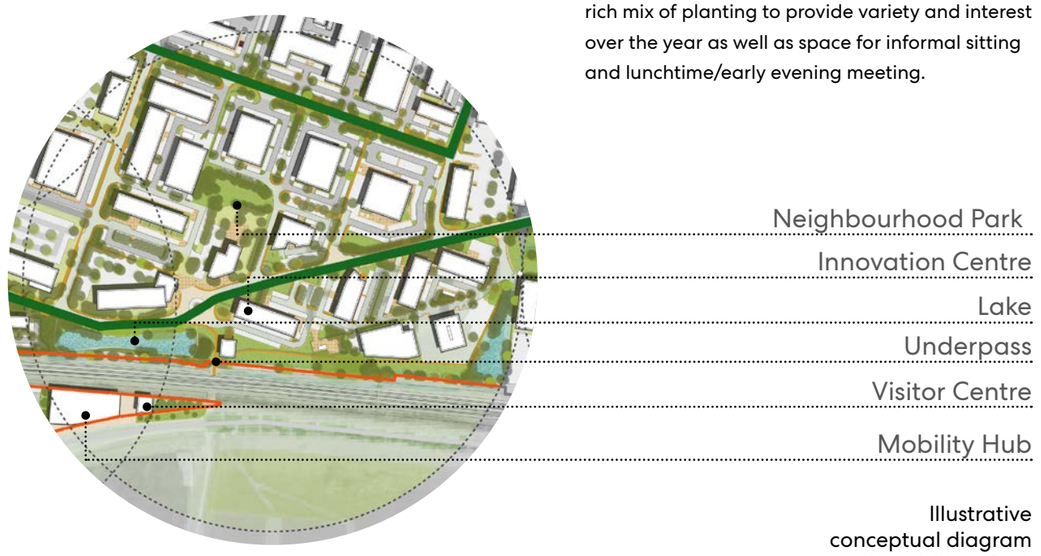
4.11 Pedestrian prioritisation (e.g. raised table or shared surface) and use of crossings would be appropriate to improve the pedestrian movement around Park Drive roundabout.

4.12 Visitor cycle parking should be close to building entrances, connecting to cycle lanes or shared pedestrian/cycle paths with priority at junctions.

4.13 Spaces to accommodate outdoor seating supporting active ground floor uses should be provided.

4.14 The existing water body and surrounding habitat should be retained and enhanced in line with the Biodiversity Strategy.

4.15 The neighbourhood park should provide a rich mix of planting to provide variety and interest over the year as well as space for informal sitting and lunchtime/early evening meeting.



Illustrative conceptual diagram from Milton Park Vision 2040

Milton Park West

4.16 Milton West has the opportunity to create a smaller scale more intimate neighbourhood character area well related to the adjacent Milton Village and Conservation Area in terms of its scale, uses, and character.

4.17 There is an opportunity here to expand the core of existing facilities which is currently provided by the existing gym.

4.18 Improved walking connections to Milton Village are encouraged, improving access for Park employees to the village and for village residents into Milton Park for walking and amenities.

4.19 This neighbourhood can also incorporate elements of serviced accommodation as an appropriate residential scale transition between Milton Village and Milton Park.

4.20 As identified in the 2040 Vision, there is an opportunity in this area to provide a new connection to the High Street to help accommodate vehicle, pedestrian and cycle movements arising from the growth of the park.

Design objectives

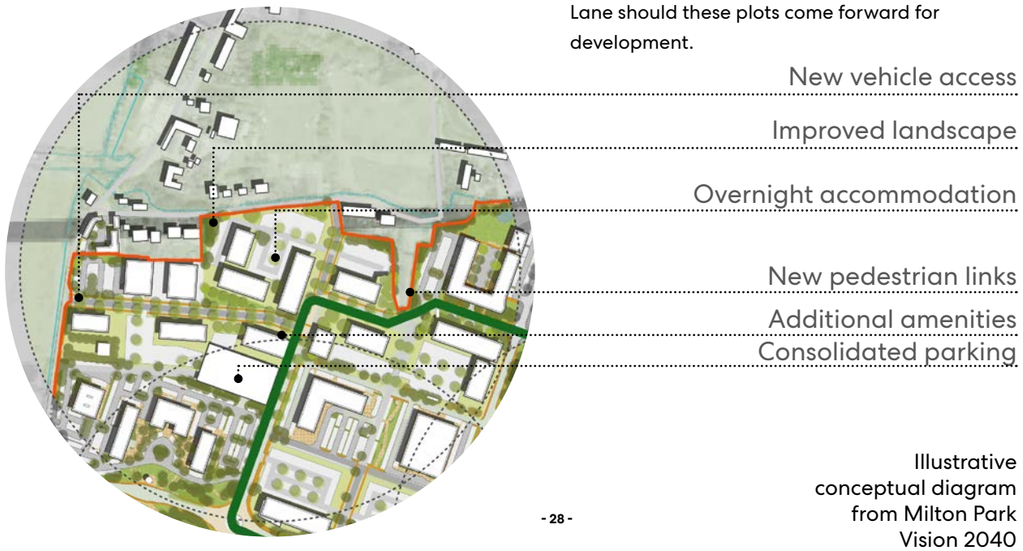
4.21 Buildings design should respond to the sensitivity of the built and landscape interface with the adjacent Milton Village and its Conservation Area designation in scale, massing, and materials.

4.22 Maximum building heights are reduced in this area to provide a suitable transition in scale to the neighbouring village of Milton and its Conservation Area (LDO Plan 3).

4.23 Building materials should be selected with the awareness of the sensitivity of views from the Conservation Area, adopting detailing and colour palettes that recede in views between and through the tree buffer.

4.24 Serviced accommodation should be designed to have active frontages facing the street, avoid overlooking of neighbouring property (in line with adopted policy and guidance on separation distances and responding appropriately to the relative building heights involved).

4.25 A 15m Landscape Zone will be created along the the northern boundary adjacent to the Conservation Area and a further 10m Landscape Zone will be created along the western boundary with the High Street. It is intended that the Landscape Zone will provide a planting buffer which will help to retain a soft green boundary to the Park and provide screening of built form within the Park in views from the Conservation Area. Part of the Landscape Zone along the northern boundary provides the opportunity for the buffer to be significantly increased adjacent to the junction between Old Moor and Pembroke Lane should these plots come forward for development.



Illustrative conceptual diagram from Milton Park Vision 2040

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Milton Park Gateway

4.26 This character area covers both north and south of the railway line.

4.27 Although not currently connected both areas function as the western gateway to Milton Park, and to the south of the railway line as the gateway to Didcot.

4.28 The existing hotel and conference functions support the highest concentration of visitors to the area.

4.29 South of the railway the current infrastructure is focussed on road side uses with fewer facilities for pedestrians or cyclists.

4.30 To the north of the railway, the Market Place currently has the highest concentration of amenities in Milton Park. Pavements are often busy through this area.

4.31 There is an opportunity to provide a higher quality pedestrian environment and facilities in this neighbourhood and create a greater sense of place within this important gateway location.

Design objectives

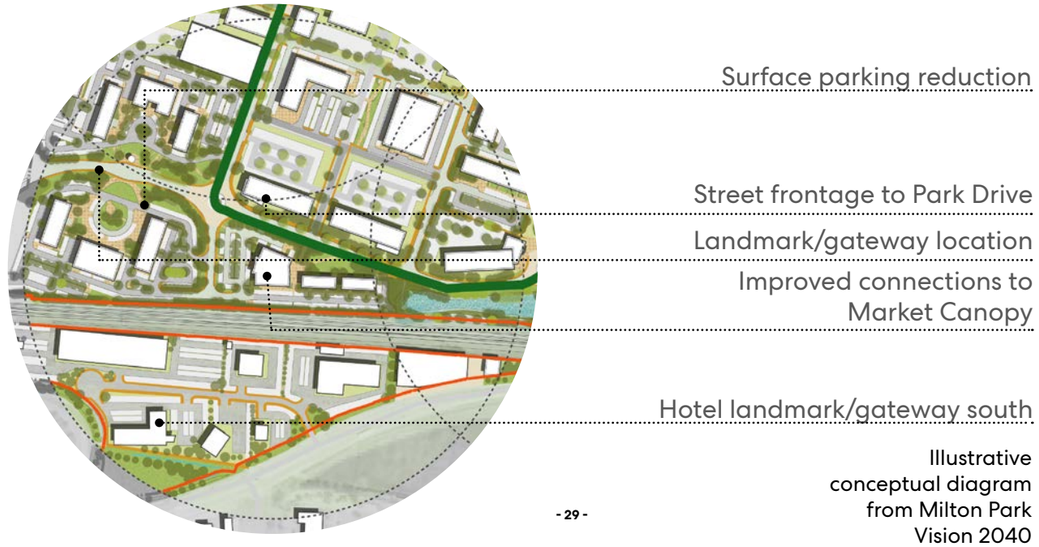
4.32 An enhanced appreciation of this area being a gateway entrance from buildings 2, 3, 4 Park Drive could be created by adding height and bringing activity closer to the street. Within the wider neighbourhood, buildings north of the railway are to sit within a 18.5m building height parameter and to the south of the railway a 16m parameter (see LDO Plan 3).

4.33 Cycle and footpath improvements east-west under the A34 and from the Milton Interchange should connect into and through this gateway.

4.34 Parking should be positioned to the rear of buildings adjacent to the railway line with car parking overlooked by ground floor windows.

4.35 The visual connection from the Milton Interchange to the Market Place should be retained through careful layout of development plots and building design.

4.36 Buildings set on or below the treeline should adopt darker muted colours to facades facing views from the south west of Milton Park. Where height parameters allow buildings to reach beyond the current treeline the upper floors should have lighter colours on facades facing these views to reduce visual prominence.



Illustrative conceptual diagram from Milton Park Vision 2040

Milton Park East

4.37 There is an opportunity to establish this new neighbourhood through the transformation of existing warehouse and industrial sheds into labs/offices and amenities. This area is very visible from the railway line.

4.38 This location has the opportunity to include significant green space with landscape and amenity functions. This green space will replace areas currently occupied by concrete hard standing and shed roofs, therefore having the potential to significantly increase biodiversity and water management opportunities.

4.39 With the removal of the large footprint buildings and creation of a more people friendly environment, this location can provide connections to the strategic pedestrian and cycle network through the centre of the park.

Design objectives

4.40 A neighbourhood centre with heights up to 22.5m could be positioned to provide a focal point for activities in the neighbourhood and views from a new open space (see LDO Plan 3).

4.41 Future building footprints should provide frontages on to a central green open space.

4.42 Space can be provided for high capacity consolidated parking adjacent to the railway line and suitably screened by landscaping. Parking should be discretely positioned on the boundary with the railway line.

4.43 There may be opportunity for an eastern underpass to provide easy access to a potential new connection over the railway line (known as the 'Science Bridge') and future development through the Didcot Garden Town initiatives.

Illustrative conceptual diagram from Milton Park Vision 2040

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Milton Park North

4.44 In line with the Enterprise Zone, Milton Park North creates opportunity for a new development edge which takes into account its relationship to the existing Scheduled Monument and the southern extension of the neighbouring village of Sutton Courtenay.

4.45 To protect this Scheduled Monument, there is a 'no build' zone (30 m in width) identified in the LDO (LDO Plan 2 and LDO Plan 3). The first 15m south of the boundary is reserved for Advanced Strategic Planting, beyond this the No Build Area is only to be used for landscaping in order to maintain a soft edge in views from Sutton Courtenay to the north.

Design objectives

4.46 A carefully graduated approach to development should be taken from the No Build Area, stepping up to a 12m height and then 14m height parameter.

4.47 Pedestrian and cycle connectivity to both the public footpath and permissive routes across the fields to Sutton Courtenay and Milton Village should be maintained.

4.48 Vehicular access to Milton North can be provided from the south within Milton Park and, in the long term, from the north to Sutton Courtenay Road creating a greater choice of circulation.

4.49 Improvements should be sought to the ecological value and enjoyment of Moor Ditch and protection from new development by providing a 10m buffer.

4.50 Variety in building forms, projections and set-backs, should create a variable, not monotonous, built edge in views from the north (see Illustrative guidance on approach to reducing visual presence in views from north of Milton Park, page 32).

4.51 On northern facades, cladding should vary using complementary sustainable finishes in neutral tones to reduce prominence in views.

4.52 Buildings set on or below the treeline should adopt darker muted colours to facades facing views from the north of Milton Park. Where height parameters allow buildings to reach beyond the current treeline the upper floors should make use of lighter colours on facades facing these views.

4.53 Lighting hours and intensity along Moor Ditch should be managed to reduce potential disturbance to wildlife and effects of lighting on views from the north should be minimised in accordance with the LDO conditions.

Illustrative conceptual diagram from Milton Park Vision 2040

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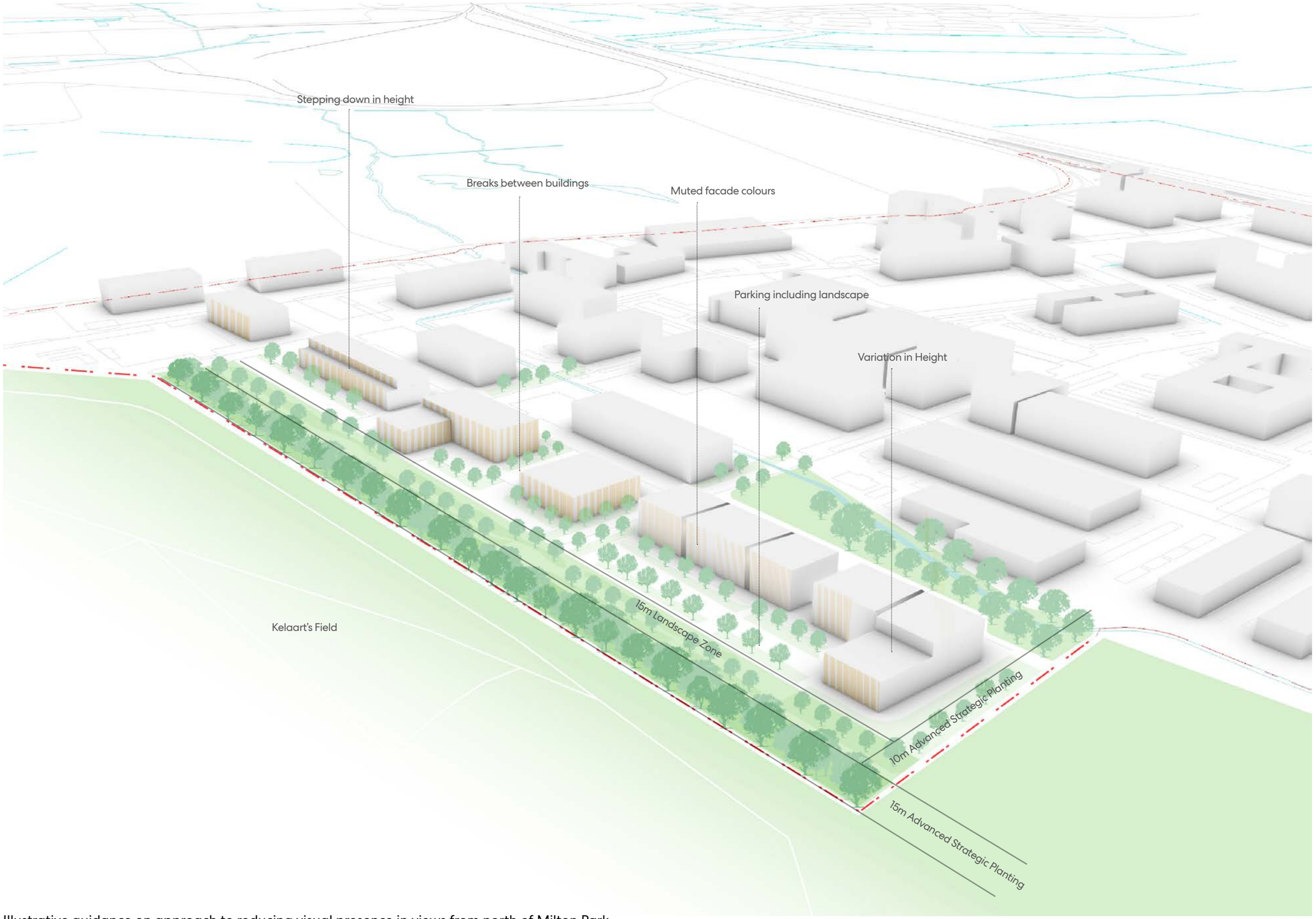

Illustrative guidance on approach to reducing visual presence in views from north of Milton Park

Vale of White Horse

Perkins&Will

Milton Park