



Jonathan Kendall

Oxford North

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1 (previous) CGI of masterplan showing elevated view from above Port Meadow, looking north east with broad landscape context.

2 Rendered illustrative masterplan showing Oxford North in context.

Project Details

Author	Jonathan Kendall
Practice	The author is Partner and Director of Urban Design at Fletcher Priest Architects
Title	Oxford North
Output Type	Masterplanning
Function	Mixed-use urban district
Dates	2015 (ongoing)
First Phase	2015 to 2019 research, consultation and planning (Resolution to Grant given in December 2019)
Location	Oxford
Area	30 hectares (ha)
Commissioning Body/Client	Thomas White Oxford Ltd, the development company of St John's College, Oxford
Practice Team	Jonathan Kendall, partner in charge, masterplan; Stina Hokby, associate partner; Keith Priest, partner in charge, phase one architecture; Joseph Sweeney, senior associate; Alexandru Malaescu; Danya Bali; Karan Bakre; Ayshah Begum; Philip Pryke; Gerry Whale; Clare Donnelly (Oxford North). Iulia Fratila; Alexandru Malaescu; Vsevolod Kondratiev-Popov; Minesh Patel (Mid-Vale Archipelago)
Infrastructure Consultants	Peter Brett Associates, Stantec
Landscape Architects	Townshend Landscape Architects (Oxford North); Bradley Murphy Design (Mid-Vale Archipelago)
Energy and Sustainability Consultants	Hoare Lea
Structural Engineering	AKT II

PROJECT DETAILS

Planning and Commercial Advice	Savills UK, planning and commercial advice
Development Economics	Harry Aubrey-Fletcher (Mid-Vale Archipelago)
Cost and Project Management	Gardiner & Theobald
Budget	£500 million
Funding	Local Growth Fund £5.9 million; £10 million Homes England

Statement about the Research Content and Process

Description

Oxford North is a masterplan for the creation of a new urban district that redefines the northern edge of the city of Oxford. It is the product of an interdisciplinary and team-based design process over an extended period of time. The design proposes the creation of architectural and landscape spaces for science-based and knowledge-economy activities of global significance, capitalising on academic research undertaken in and around the University of Oxford. The design is multiscalar and mixed-use. It creates conditions for overlaps between public and private realm, and interaction between employment, residential and community functions.

Questions

1. How can urban morphology and density support new research activity while strengthening Oxford's economy?
2. How can public permeability and porosity be encouraged within knowledge-intensive and commercially sensitive research environments?
3. How can phased implementation establish place and identity during ongoing change in an initially unoccupied landscape setting?
4. What is the role and effectiveness of central, regional and local government in the facilitation of major urban change in historic urban environments?

Methodology

1. Creation of typological and morphological catalogues of UK and international precedents to support comparison and analysis;
2. Creation of site-specific strategic landscape connectivity proposals, combined with abstracted organisational principles for 'clusters' of mixed-land uses;
3. Parallel and analogous speculative design proposals for placemaking in relation to infrastructure investment from the UK National Infrastructure Commission;
4. Consultation and engagement with existing communities living in proximity to the site and across Oxford, Oxford City Council, Oxfordshire County Council and representatives of numerous statutory bodies.

Dissemination

The author has discussed the work in events in London, Riga and Silverstone. Numerous documents are in the public domain, including the *Oxford North Design and Access Statement* and the *Oxford North Public Realm Strategy*. Oxford North has been shown in three public exhibitions and consultation events in Oxford. Mid-Vale Archipelago has been exhibited in Milton Keynes. One of the Oxford North models was selected for display at the Royal Academy of Art's *Summer Exhibition 2018*.

Project Highlights

Oxford North is the largest strategic project undertaken in the city of Oxford over the past 100 years, supporting world-leading research and the creation, incubation and growth of knowledge-intensive employment. It is projected that the completed project will contribute £150 million per year to the Oxford economy in gross value added, and more broadly support a key element of UK economic strategy.

In recognition of its strategic importance for the city and planned growth of the Oxfordshire economy and the Oxford-Cambridge corridor, significant public funds have been made available to support the scheme: Oxfordshire Local Enterprise Partnership (OxLEP), Oxford City Council and Oxfordshire County Council secured £5.9 million from central government's Local Growth Fund, with a further £10 million of funding provisionally secured by Oxford City Council from Homes England.

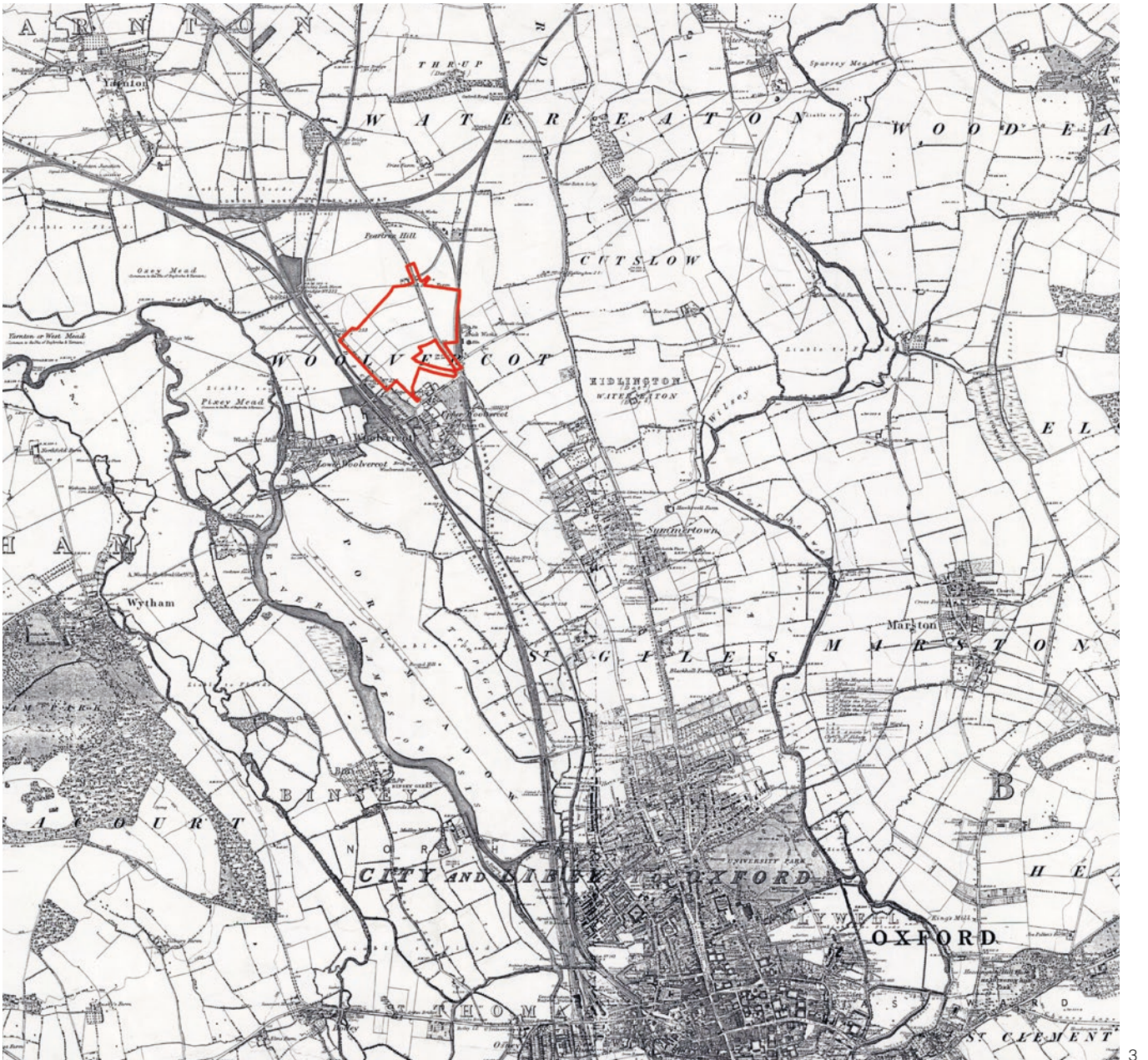
Oxford North informed Fletcher Priest's finalist project in the National Infrastructure Commission's The Cambridge to Oxford Connection: Ideas Competition (2017).

Introduction

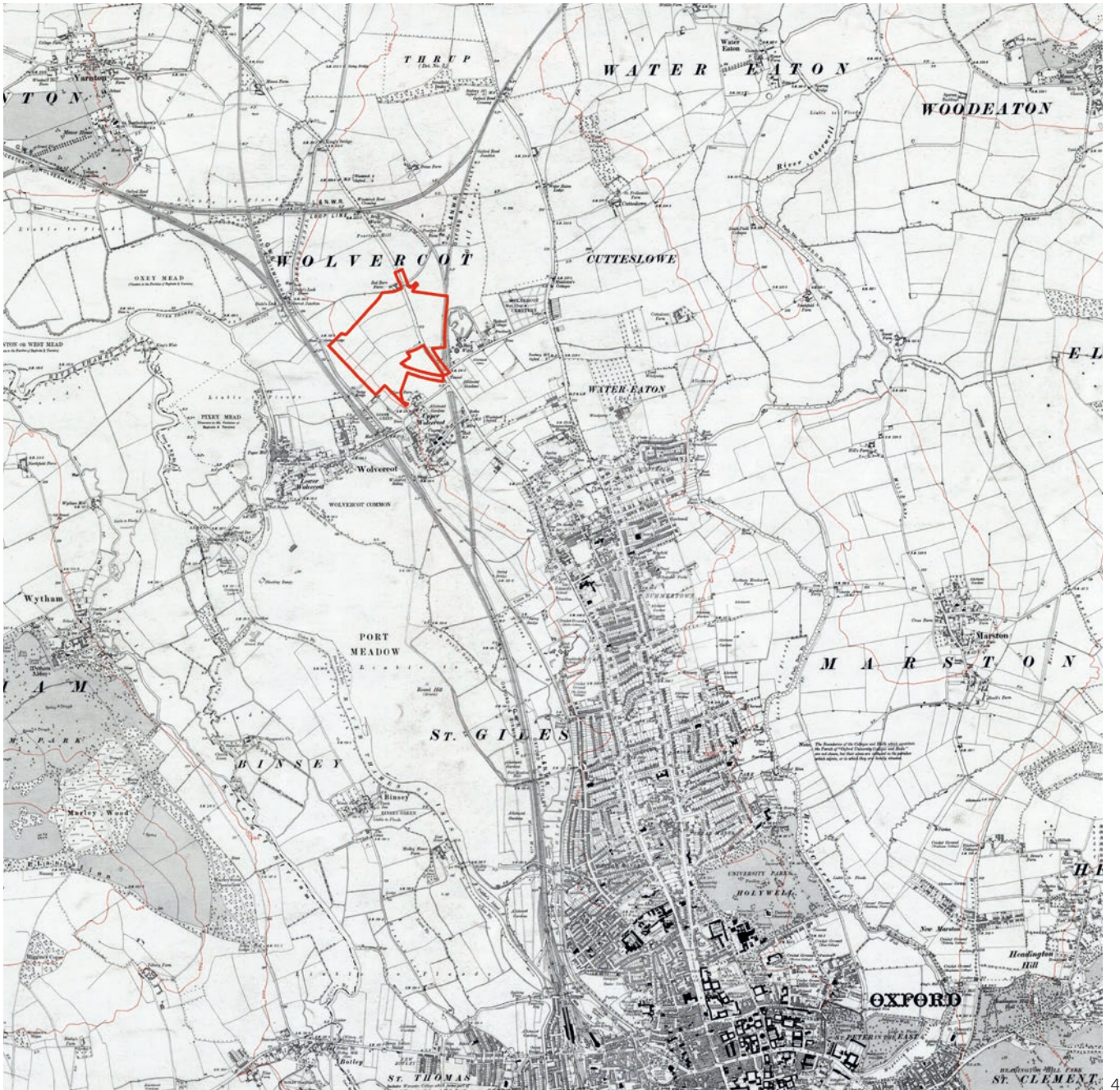
Oxford North is a large-scale masterplan for the creation of a new urban district in Oxford. It redefines the northern edge of the city, transforming agricultural land currently dominated by urban highways and associated structures, with heavy vehicular movement having a dominant impact on noise and air quality. The A40 and A44 roads meet at a roundabout to the south and divide the site into three parts, while the elevated A34 forms a boundary to the north. The surrounding area is shaped by nineteenth-century suburban expansion, which extended the city beyond Summertown and enveloped villages including nearby Wolvercote. In administrative terms, the site sits just within the boundary of Oxford City Council, while certain strategic issues, including highways and education, are the responsibility of Oxfordshire County Council.

The land on which Oxford North is located is approximately 30 ha in area and has been owned by St John's College since the Enclosure Acts in the early seventeenth century, when it was acquired and gifted to the college by its founder Sir Thomas White. The site has been historically used for agricultural purposes, continuing to the present day. Part of the site was previously sold to Worcester College, but was repurchased in 2015 to consolidate land into a single ownership and help facilitate the current project. The area immediately to the east of the site served as a nineteenth-century brickworks, a legacy of which is a man-made lake created from a former clay pit.

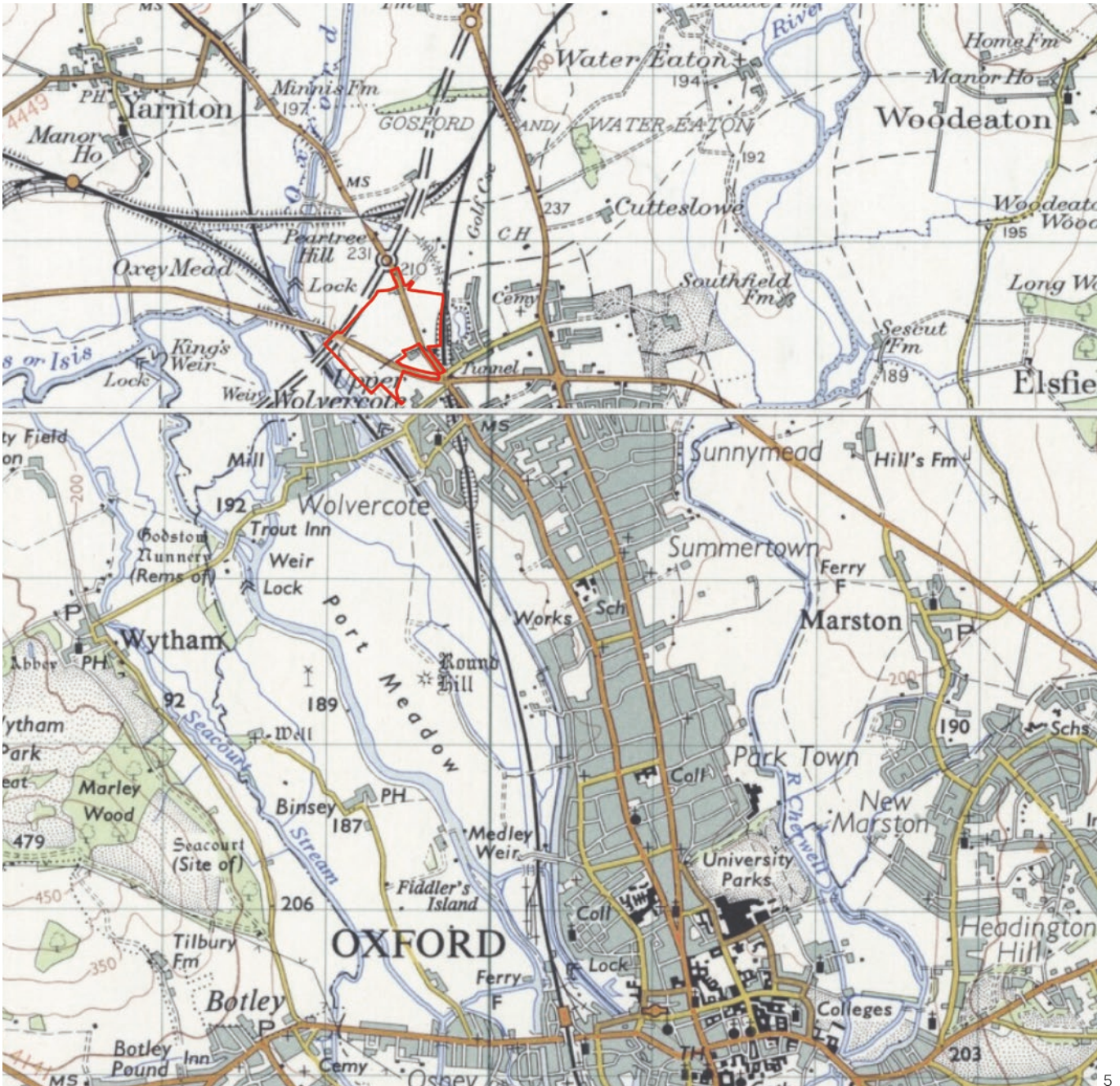
INTRODUCTION



3 Map of Oxford, 1879–87.
Site boundary overlaid in red.



4 Map of Oxford, 1911-22.
Site boundary overlaid in red.



5 Map of Oxford, 1959-60.
Site boundary overlaid in red.



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6 Land ownership map from St John's College Archives, showing original enclosure of field boundaries.

INTRODUCTION



7 Oblique aerial view of site, taken from the south.



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8 Plan diagram showing location of formally assessed viewpoints for townscape and landscape visual assessment.

The potential transformation of the site has been promoted by Oxford City Council through planning and economic policy, in particular the Northern Gateway Area Action Plan (AAP) adopted in 2015, against which the design has been formally assessed. The AAP document is the product of a comprehensive investigation across numerous economic and environmental strands, and has been shaped through extensive public consultation. The vision for the Northern Gateway is 'to create a world-class employment area which will build on the strengths of Oxford's economy in the key sectors of education, health, research and development, and knowledge-based businesses linked to our two universities and our hospitals' (Oxford City Council 2015, p. 2).

Fletcher Priest Architects were appointed as masterplanning architect in late 2015, with a brief to develop comprehensive design proposals for the land within the control of St John's College through their wholly owned development company, Thomas White Oxford Ltd. The design is the product of an interdisciplinary process over an extended period of time – five years in its first phase – developed in collaboration with a full team of specialists across landscape, engineering, sustainability and economic disciplines. A masterplan for the whole site has been combined with detailed architectural design for a group of buildings and spaces forming the first phase of the project. The work has been formally documented in a hybrid planning application, which includes environmental assessment of flexible parameters that define physical limits for the project and reflect the need for flexibility and adaptability over multiple phases.

The research focus of the design process has been to establish appropriate urban and architectural form that can sustainably accommodate knowledge-economy activities of global significance, capitalising on the academic research being undertaken in and around the university environment. The project integrates a mixture of land uses and is underpinned by approximately £100 million of infrastructure investment, including £30 million being spent on improving highway, cycle, bus and pedestrian networks. It will include workspaces for around 4,500 new jobs, bringing together academia and commercial activity. 480 new homes will be built in a mixture of houses and apartments, accommodating a projected population of around 1,500 people.

Oxford City Council resolved to grant planning permission in December 2019. Final legal agreement and issue of formal planning consent is expected in December 2020. The first stage of implementation involves upgrades to the A40 highway in early 2021, following which initial onsite infrastructure for earthworks remodelling and below-ground utilities will take place, leading directly into construction of the first buildings.



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9 Physical masterplan model, showing elevated view of central area of site taken from the north west.

INTRODUCTION



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10 Physical masterplan model showing elevated view from the south west.



INTRODUCTION



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Aims and Objectives

Oxford North will transform a strategic but currently inaccessible site at the start of the Oxford to Cambridge corridor and knowledge arc. It aims to generate a sustainable community and long-term business growth, forecasted to contribute approximately £150 million gross value added per year to the local and national economy.

In research terms, the project seeks to establish appropriate morphological and typological conditions for peri-urban, large-scale development. The site embodies a set of physical characteristics that reflect wider conceptual hybridities. The project reflects an overlay of global activities – research, development and technological innovation (particularly in life-science sectors) occupied by internationally mobile organisations and highly expert personnel – on a location that is culturally and architecturally specific and valued in heritage terms. These qualities include both the academic centre of the city and the broader landscape within which it is located, e.g. Port Meadow – ancient open grazing land to the north and west of the city – and Wytham Woods – ancient semi-natural woodland further to the west, now owned, managed and extensively researched by the university and designated a Site of Special Scientific Interest (SSSI).

In this context, the proposals include numerous environmental and landscape aspects. The land will be opened to public access for the first time, delivering more than 9 ha of open space, with three new grassland parks interconnected with linear paths, streets and native hedgerow planting. Swales and ponds form part of a sustainable drainage strategy to attenuate and slowly release surface water and support habitat and biodiversity opportunities. An innovative Energy Sharing Loop system – introduced in

the first phase and scalable across the whole site as the project is delivered incrementally – shares energy between diverse land uses. It is projected to save 21,000 tonnes of CO₂ per annum, compared to conventional energy systems, and includes 450 closed-loop ground-source heat-pump boreholes interconnected with photovoltaic arrays. As a combustion-free energy system, it sits within broader ambitions shared between client, city and national government to move to decarbonisation of the UK electricity grid.

11 (previous) CGI showing interior street conditions within detailed first phase architectural design.

Questions

1. How can urban morphology and density support new academic activity while strengthening Oxford's economy?

One of the aims of this project is to provide a mixed-use environment in which knowledge-intensive economic activity can take place. It aims to encourage globally significant organisations to relocate alongside newly established enterprises, particularly those originating from ongoing academic research, facilitating the broader economic success of the city and region. The design explores the relationship between urban morphology and density and dynamic processes of organisational growth and change. It identifies residential and entrepreneurial building typologies, sizes and configurations that can attract, support and retain such enterprises alongside a network of 9 ha of green spaces.

2. How can public permeability and porosity be encouraged within knowledge-intensive and commercially sensitive research environments?

The intention for the project is the creation of an active environment linked to its wider urban context, encouraging public access and circulation through the site. This includes a new central link road that forms an organising spine through the central land area, together with a network of pedestrian, cycle and vehicular routes within the site and more than 9 km of new and improved cycle routes in the wider network. There is a potential tension between ambitions for the creation of value through serendipitous social interaction and ring-fenced commercial activity for research-intensive environments.

The research seeks to explore the degree to which permeability and porosity can be enabled through masterplanning design, in a manner that acknowledges these development dichotomies and fosters both sociability and creative growth?

3. How can phased implementation establish place and identity during ongoing change in an initially unoccupied landscape setting?

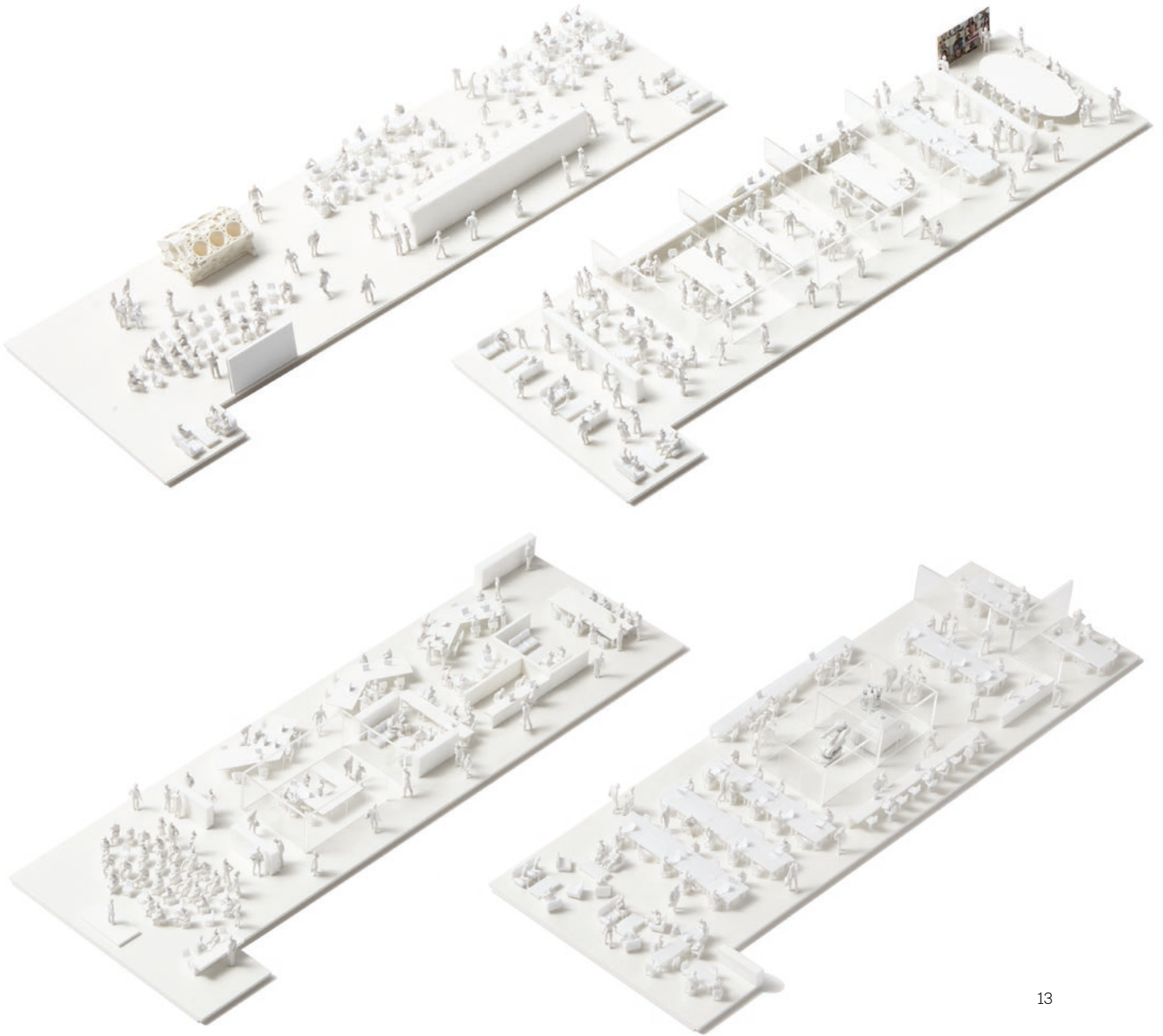
In contrast to the design traditions of hermetic science park campuses, the aspiration for Oxford North is to create an inclusive urban environment characterised by mix, vitality and street-level intensity. The site is currently characterised by open fields and intrusive highways. This leads to a broader question regarding phased implementation and a sustainable process of transformation that will encourage social, physical and academic connectivity. The design process seeks to explore where early development can be located on the site and how the land can be incrementally changed in a manner that supports significantly transformed urban identity while protecting and enhancing green assets. Delivery of new homes, public realm and connectivity in parallel with workplaces creates an integrated and social milieu from inception, underpinned by environmental sustainability measures that are intended to progressively strengthen through the further passage of time.



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12 The headquarters of Facebook, Menlo Park, California. The architects, Gehry Partners, designed a continuous interior to facilitate interaction and innovation.

QUESTIONS



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13 Detailed model showing inlaid floors exploring potential activity within Red Hall amenity and incubator building.

4. What is the role and effectiveness of central, regional and local government in the facilitation of major urban change in historic urban environments?

The project has been shaped by governmental activity at city and regional scale, and through a design process led by Thomas White Oxford Ltd. The masterplanning process has involved activity across sectors and the steps from initiation to implementation will involve complex interactions between multiple parties, including privately owned development expertise and third-party capital funding.

St John's College Oxford is a UK-registered charity that fosters excellence in education and research. The development company it wholly owns exists to undertake real-estate investments that contribute to the long-term endowment of the college. This can be implemented through capital raising from banks and private equity, and undertaken in joint-venture partnership with privately owned or publicly listed development businesses. Interactions throughout the planning, approval and implementation phases have taken place with public administration at a local (city and county council) scale, with national bodies (including central government) and with public-private bodies such as the Local Enterprise Partnership (LEP). This raises ongoing questions as to the role and effectiveness of government in facilitating significant urban change. The experience of Oxford North is one of promotion by both state and third-sector bodies, including significant financial investment by the college in the technical assessment work that underpinned the Area Action Plan foundations for the project.



QUESTIONS



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14 Masked extract of masterplan image showing proposed first development phase, including detailed designs for buildings, streets and green spaces.



15 Sketch drawing showing ground floor public uses and interior activity along new street.

QUESTIONS



Context

Oxford North sits in the broader fields of research relating to technology, urbanism and interdisciplinary urban design. It has been designed with particular reference to research undertaken by the Brookings Institution in Washington, D.C., which has explored the phenomena of innovation districts.

Innovation districts are dense enclaves that merge the innovation and employment potential of research-oriented anchor institutions, high-growth firms, tech and creative start-ups in well-designed, amenity-rich residential and commercial environments. This model is interesting because it suggests an approach to economic development that integrates social and environmental interactions holistically rather than in a hitherto compartmentalised manner.

Three models of innovation district have been identified (Katz and Wagner 2014). The Anchor Plus model, of relevance to Oxford North, where large-scale development is located around major anchor institutions and a base of related firms, entrepreneurs and spin-off companies involved in the commercialisation of innovation. The most widely cited example is the Kendall Square area of Cambridge, Massachusetts, on the periphery of the MIT campus. Alternative models are the Reimagined Urban Area, found along historic waterfronts, industrial and warehouse districts, and the Urbanised Science Park, which is the transformation of existing monofunctional and car-based environments.

The non-urban (arguably anti-urban) model of the autonomous research or corporate campus set within controlled landscape has been subject to detailed scrutiny. For example, Mozingo (2014) situates the evolution of the campus in a context of mid-twentieth-century aspirations for

corporate control and image project, integrating built form and landscape in an ensemble consciously separate from the perceived complexity and chaos of the city. The innovation district phenomenon can also be positioned within the wider field of planning and urban studies, including research undertaken by Castells and Hall (1994) and Garreau (1992). The relationship of city to periphery and region explored by Garreau in *Edge City: Life on the New Frontier* (1992) includes reference to the arc of development on the periphery of Boston along the I-95/128 highway, which has shaped the physical and economic growth of the region and the wider tech economy of the East Coast of the USA through the twentieth century. In many ways, this acts as a point of comparison to the region around Oxford and the potential for growth in a corridor between Oxford and Cambridge.

Oxford North proposes advances in spatial configuration of diverse land uses, hybrid building typologies and multiscalar approaches to sustainability. It adds a new model to previously articulated innovation district taxonomies in its fusion of inner- and edge-urban qualities derived from its role in redefining the boundary of its city, creating a new 'face' to the north. Simultaneously, the significance of its location can be understood in how it operates in a key pan-regional role within the proposed Oxford to Cambridge Arc, where it will form the western end of the corridor. It includes innovations in the approach to energy distribution and heat sharing, which are particularly important and relevant in the pursuit of zero-carbon development.



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16 Kendall Square innovation district, Cambridge, Massachusetts.

Methodology

1. Creation of typological and morphological catalogues of UK and international precedents to support comparison and analysis

At the start of the masterplanning process, in parallel with contextual analysis and historical desktop research, a programme of systematic typological and morphological investigation was undertaken. The purpose of this exercise was to explore and catalogue relevant models of urban and architectural form for reinterpretation within the proposals.

Models of urban, peri-urban and campus-based districts and research parks were reviewed, alongside emerging models of singular architectural design at the extremes of scale. The recently completed Apple Park, Cupertino, is a case in point, primarily formed of a pure ring of built form defining and enclosing a circular internal parkland. Of particular consideration was the relationship between generic and specific architectural form, the mixing/separation of land uses and the hybridity of urban and rural for an urban-edge condition.

Reference places and projects including the MIT/Kendall Square area of Boston and Novartis Campus in Basel and buildings such as Clark Centre, Stanford University and Carlsberg Plot 8 in Copenhagen were redrawn to an agreed set of common scales and notations in plan and section. These included colour-coded representations of public, semi-public and private internal functions. Location-specific information on the MIT campus and its relationship to the surrounding urban context of Boston was

particularly informed by Clark et al. (2010), Jaroff et al. (2009), Mitchell (2007) and Simha (2001). Building-focused studies informing this exercise included Braun and Grömling (2005), Joyce (2004) and Southworth and Southworth (2008) for key sites within Boston and White et al. (2010) for New York. The diagrams generated through this activity were used throughout the design process to support exploration of building and cluster scales, and levels of permeability. They were also used as a basis to test, explain and support emerging proposals with the design team, clients and stakeholders, and through community consultation and engagement with officers. Comparison was also made to contemporary precedents for university-led urban regeneration, reflecting more academically focused reinterpretations of campus planning and relationship to the city, drawing on the work of Melhuish (2015).

17 Figure-ground urban-scale comparison, showing Oxford North boundary overlaid on the MIT campus.

18 (overleaf) Figure-ground urban-scale comparison, showing Oxford North boundary overlaid on Kings Cross, London.

19 (overleaf) Figure-ground urban-scale comparison, showing Oxford North boundary overlaid on Novartis Campus, Basel.

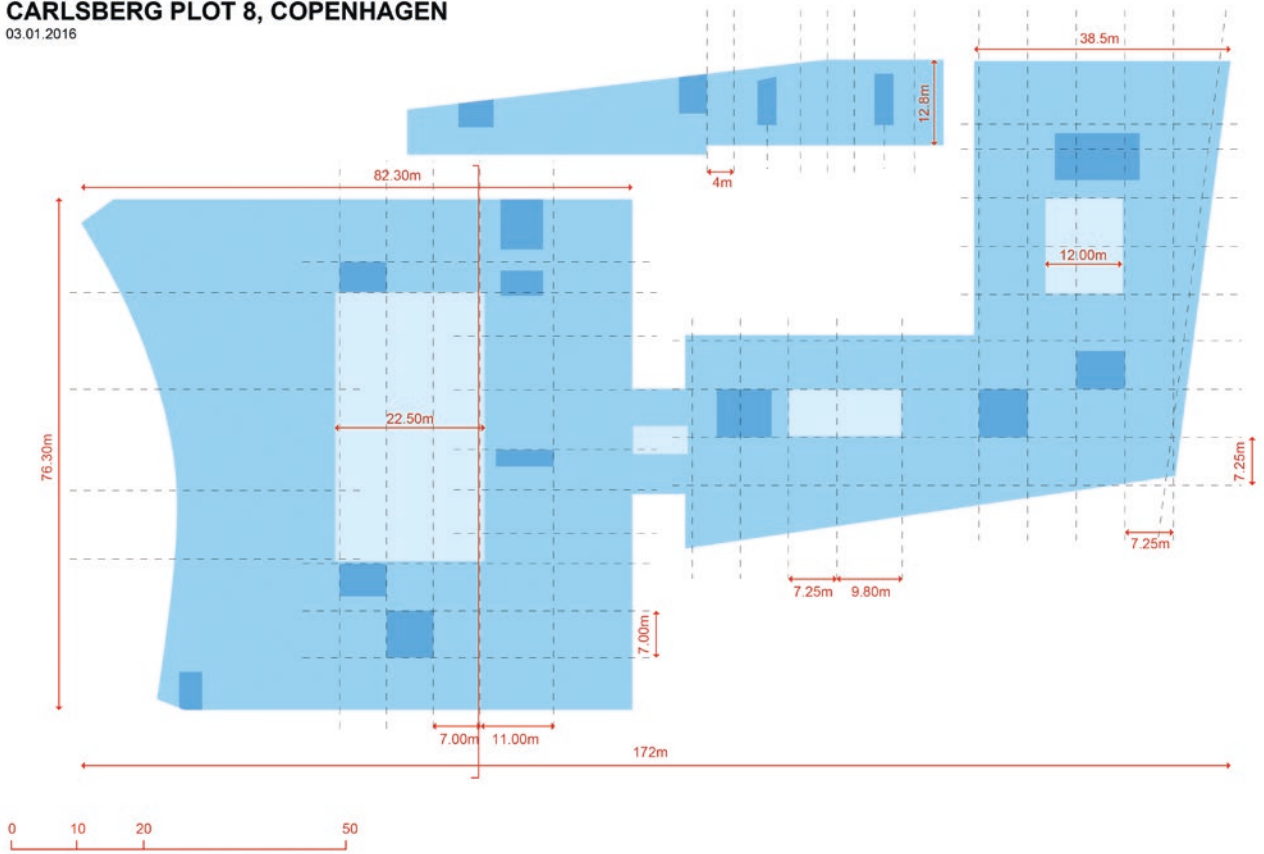






CARLSBERG PLOT 8, COPENHAGEN

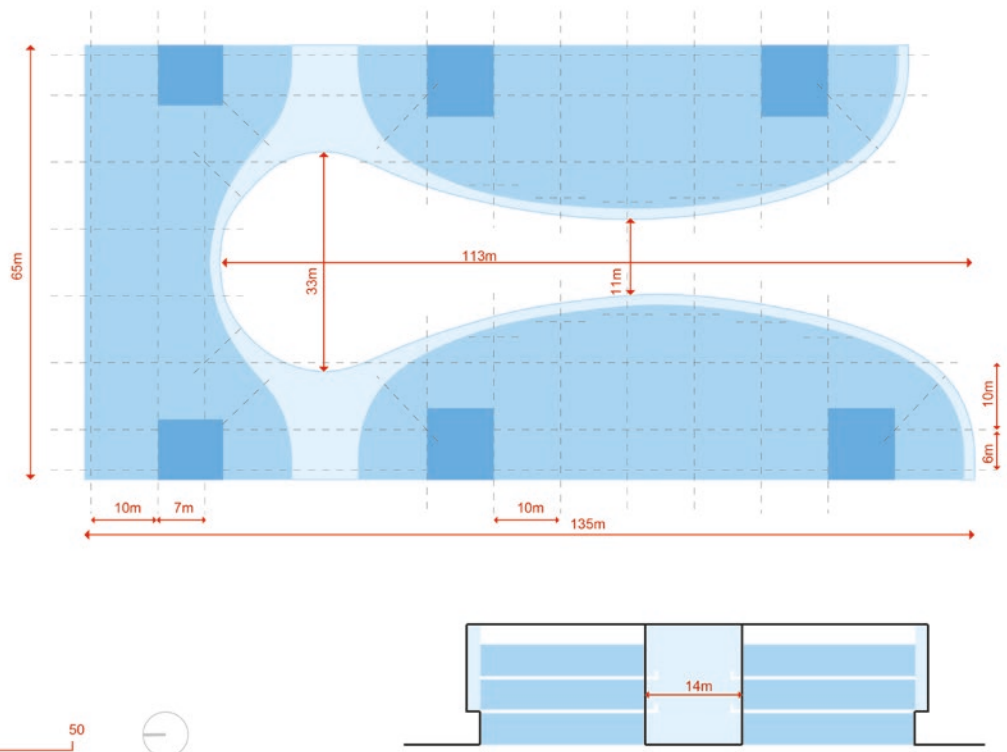
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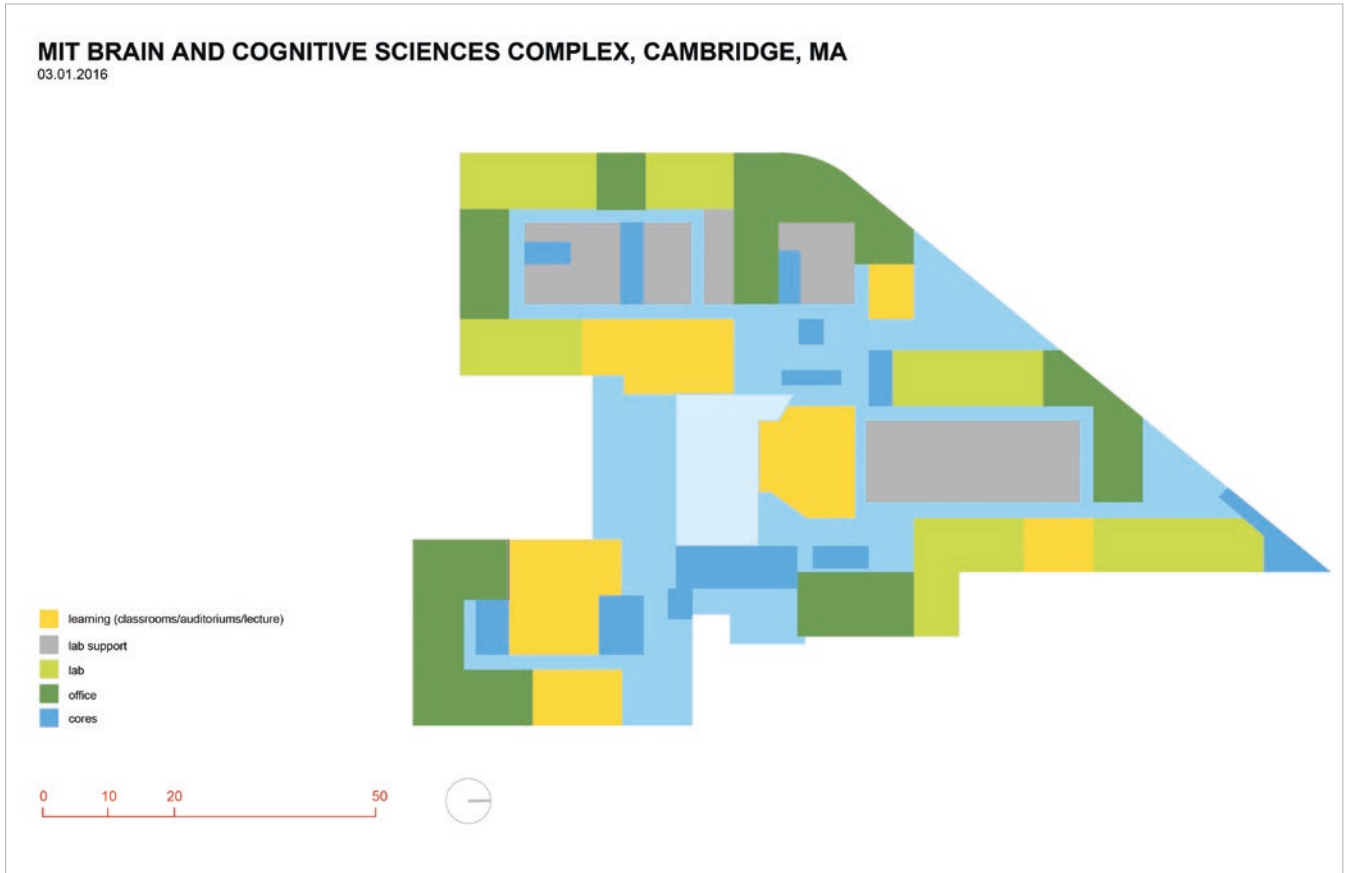
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Clark Centre, Stanford

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20 Research laboratory typology study diagram, Carlsberg Plot 8, Copenhagen.

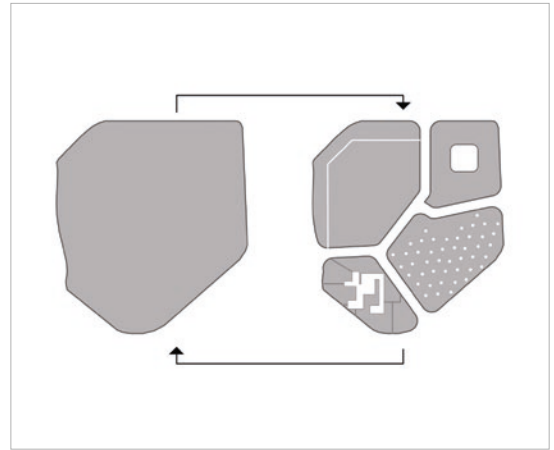
21 Research laboratory typology study diagram, Clark Centre, Stanford University, California.

22 MIT Brain and Cognitive Sciences Complex, Cambridge, Massachusetts.

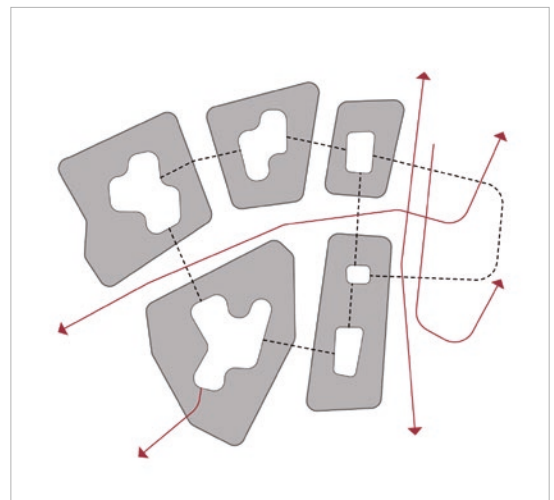
2. Creation of context-specific strategic landscape connectivity proposals, combined with abstracted organisational principles for ‘clusters’ of mixed-land uses

Parallel strands of design investigation shaped the approach to the masterplan, building on multiscalar morphological and typological research.

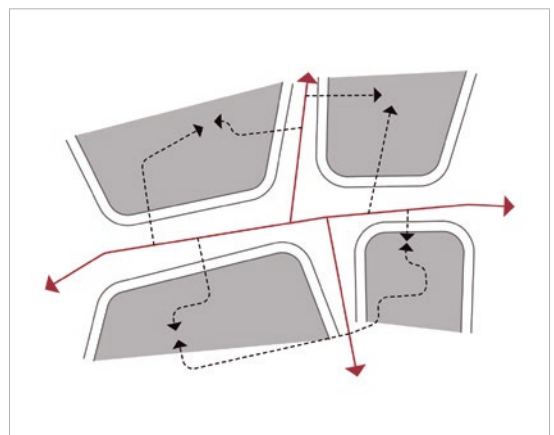
A series of design options were tested in which organisational landscape relationships were used to structure the configuration of streets, open spaces and movement patterns across the site, reflecting its complex topography and orientation. In broad terms, these sought to overlay diagonal lines of movement, reflecting local and regional relationships from south west to north east, and linking the immediate surroundings of Wolvercote and Port Meadow with the newly established infrastructural system of Oxford Parkway railway station. These linkages align with the site’s historic field patterns that date back to the Enclosure Acts as well as longstanding hedgerow planting that predates and traverses the road systems that currently fragment the site.



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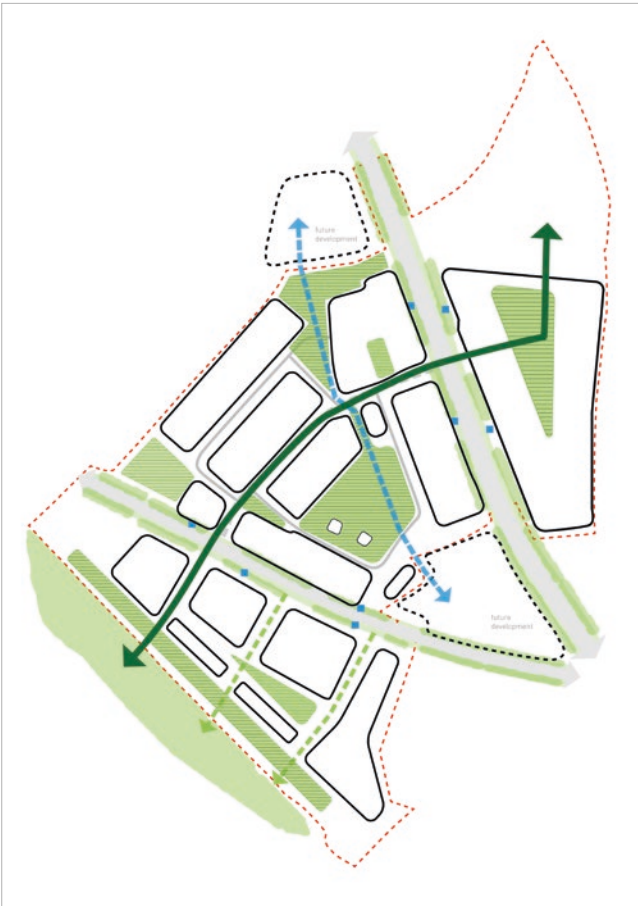


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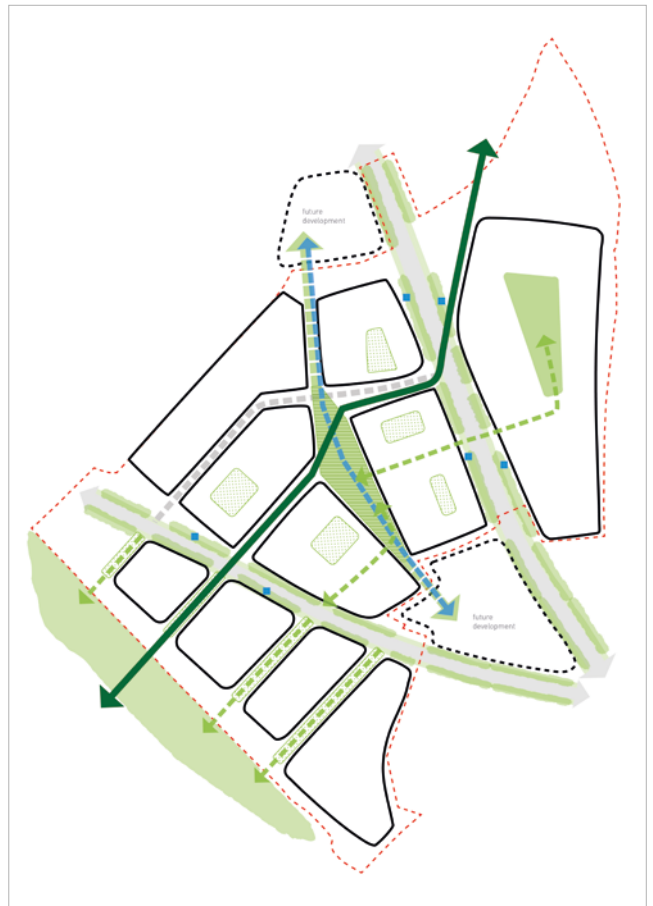
23 Abstracted morphological diagram exploring fragmentation and permeability within and between clusters of activity.

24 Abstracted morphological diagram exploring the relationship between defined clusters and strategic movement networks.

25 Abstracted morphological diagram exploring hierarchy of relationships between clusters and strategic movement networks.



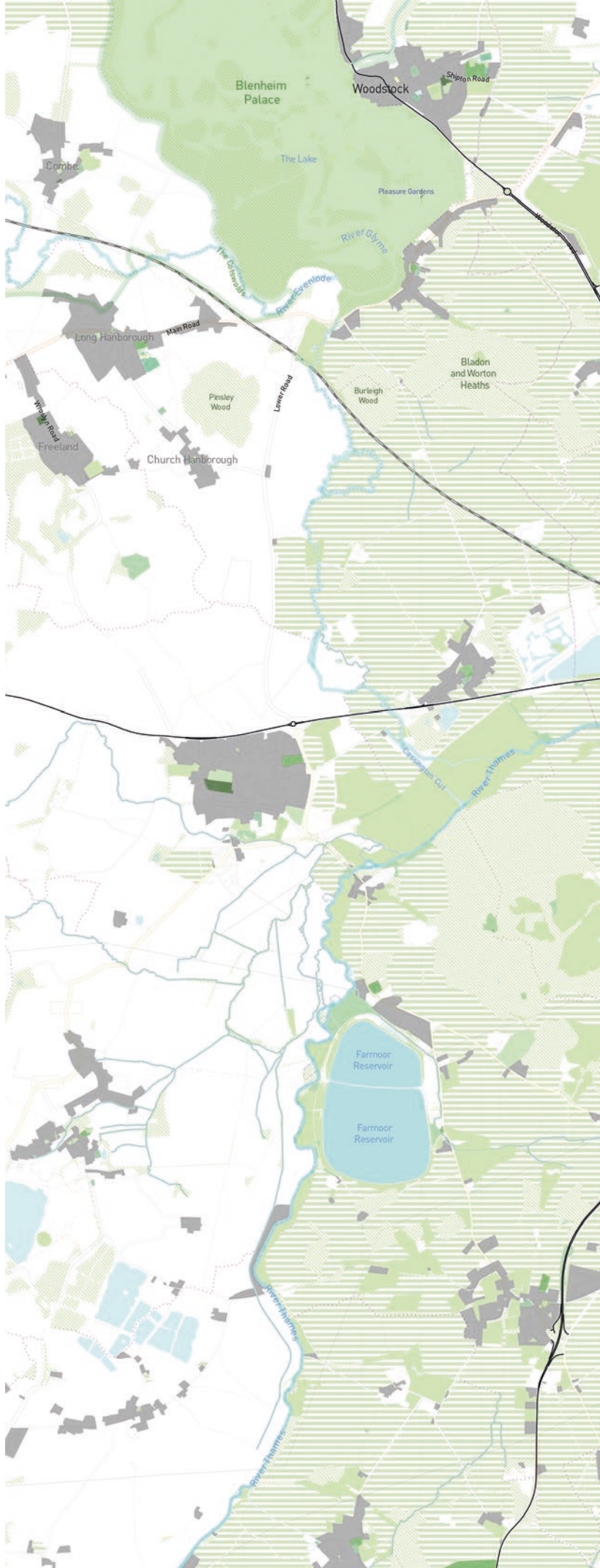
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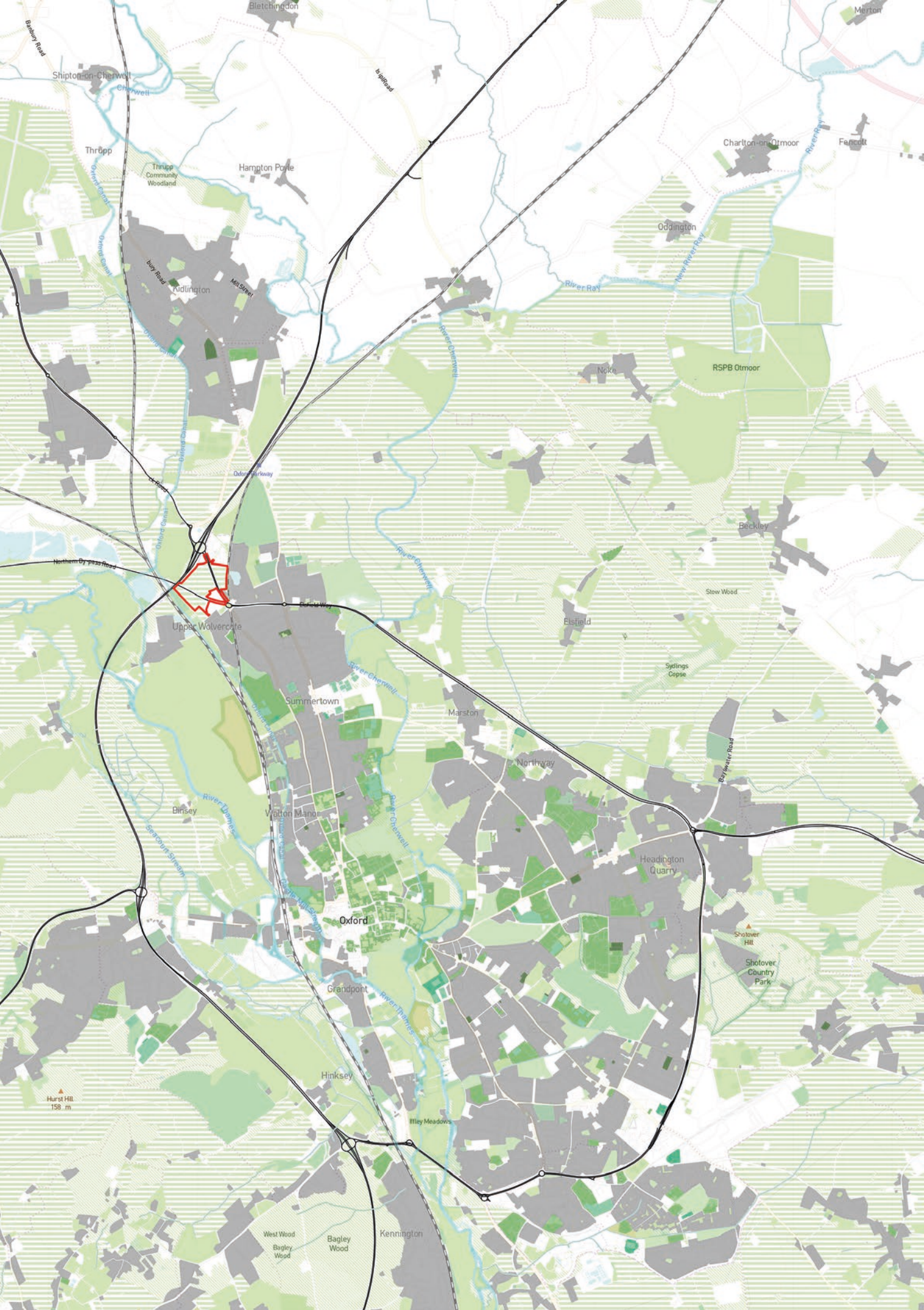
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26 Masterplan diagram showing abstraction of landscape structure and interconnection of spaces.

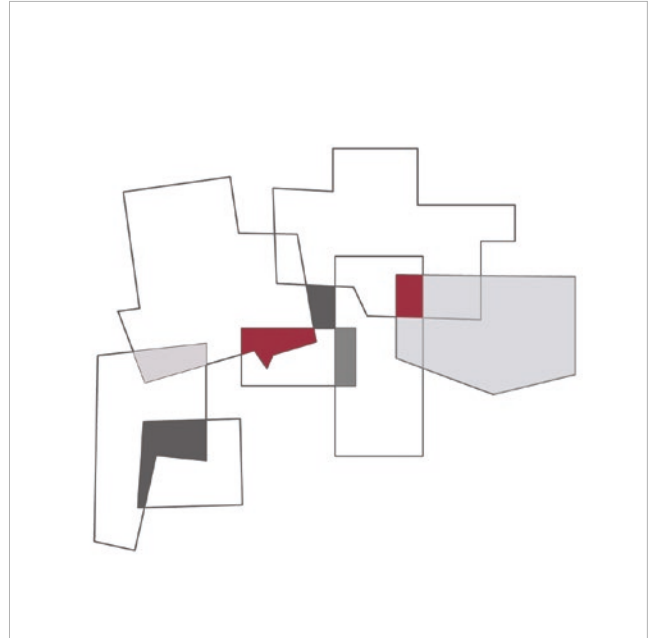
27 Masterplan option diagram showing alternative configurations of open spaces and key connections.



28 Drawing showing landscape relationships around the Oxford North site, identified by a red line.



Seeking to create place, identity and enclosure within the site, and drawing on models identified in the cataloguing of precedents, options were developed for grouping buildings into localised but permeable clusters. These clusters support linkages within, between and beneath built form to establish hybrids of public and private space. These approaches were informed by the client and public authority's desire to reject the exclusive qualities of the historical collegiate 'quad', documented in Tyack (1998) and Tyack (2005), and hermetic private science park models. The process was undertaken with ambitions to establish a new type of environment that hybridised urban and arcadian qualities, reflecting the relationship with the nearby and visually proximate landscapes of Oxford Canal, Port Meadow and Wytham Woods.



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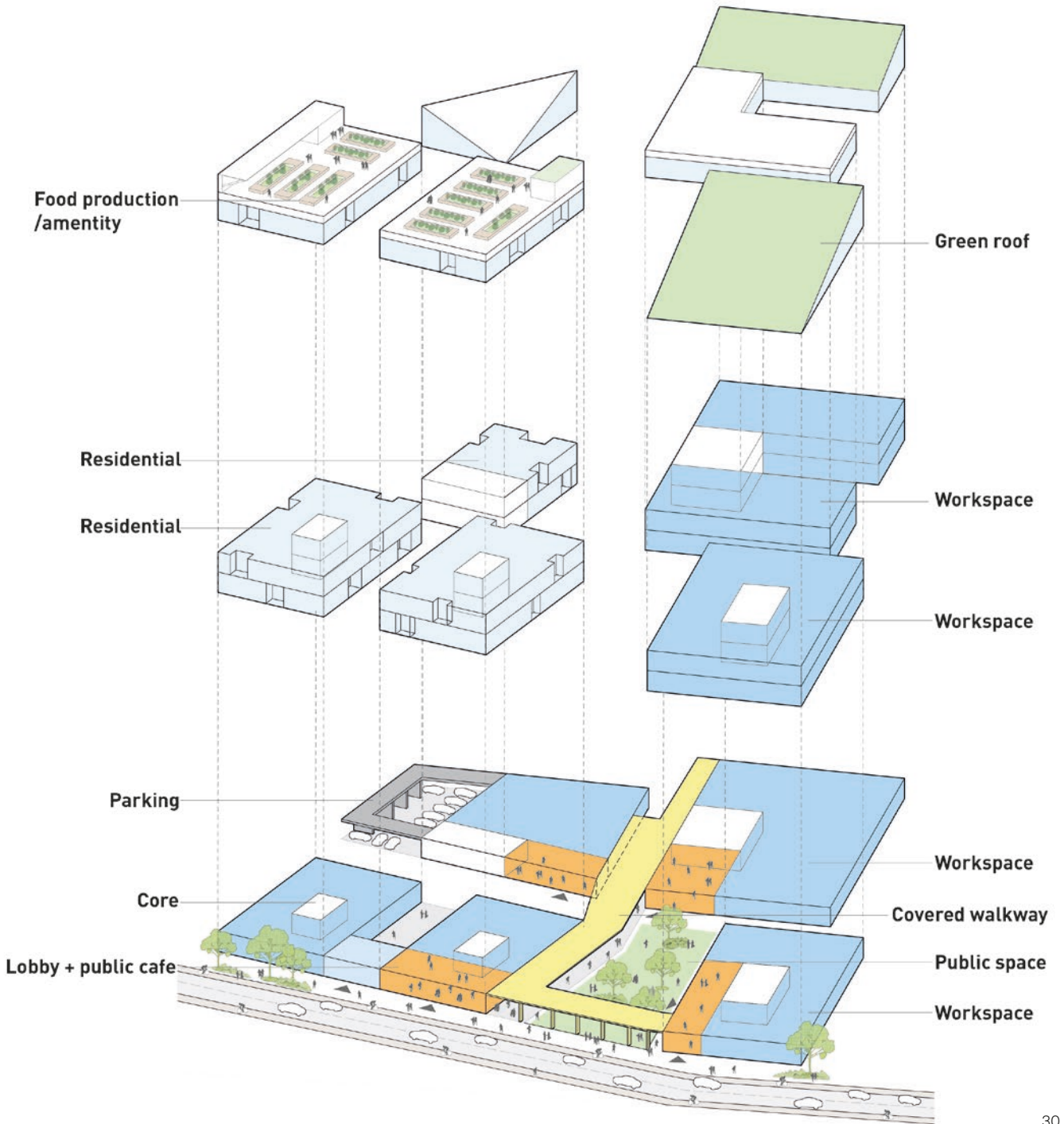
29 Abstracted organisational diagram exploring overlaps and interactions between clusters of activity.

30 Exploded axonometric diagram of abstracted mixed-use development cluster.

31 (overleaf) Mid-Vale Archipelago, 2017. Regional diagram showing relationship between poles of activity, infrastructure networks, trajectories of growth and sites for intervention.

32 (overleaf) Mid-Vale Archipelago, 2017. Scalar repetition of triangular groups of settlements between wider triangular settlements.

METHODOLOGY



3. Parallel and analogous speculative design proposals for placemaking, in relation to infrastructure investment from the National Infrastructure Commission

In parallel with the masterplan design process, a series of theoretical design proposals were generated for the National Infrastructure Commission (NIC), as part of an Ideas Competition to explore the integration of placemaking with infrastructure in the Cambridge–Milton Keynes–Oxford Corridor. The proposals were selected as one of four finalists from more than 50 original submissions, and were subsequently developed for presentation and review with NIC jury members.

The NIC was set up by the government in 2015 to develop long-term infrastructure policy and strategy. The competition sought inspirational and deliverable visions for the future of development in an arc encompassing the UK's fastest growing and most productive centres. Its purpose was to inform thinking regarding the delivery of rail and road infrastructure in relation to growth scenarios for the transformational introduction of new homes and employment spaces across the region, as set out in the National Infrastructure Commission's report *Partnering for Prosperity: A New Deal for the Cambridge–Milton Keynes–Oxford Arc* (NIC 2018).

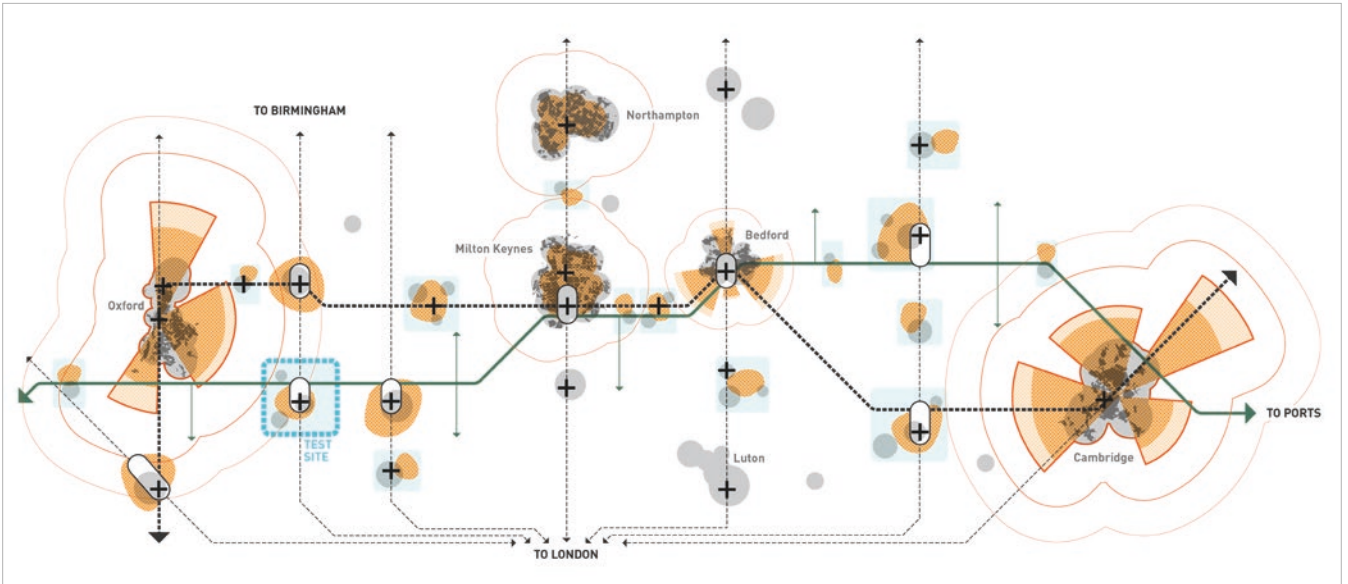
Kendall led the proposal, entitled Mid-Vale Archipelago, that was developed in the context of his team's work on Oxford North, and the ongoing design of a major new settlement, Waterbeach, immediately north of Cambridge. Mid-Vale Archipelago draws on experiences relating to these live projects, abstracting and synthesising dynamics of urban development and exploring physical forms and organisational scenarios that could inform design and policy elsewhere.

The strategy explores the relationship between delivery of new homes, with benefits for existing communities and incentives for long-term 'patient capital' returns for landowners. In the initial design phase, a setting of a fictitious town was postulated, drawing on characteristics of similar settlements in the region. Identified as Middleville, the town was defined as a settlement with a population of 5,000, with strong rail links to London but weak connections to the rest of the corridor. The designs create a vision in which the place could double in scale while protecting and enhancing surrounding landscape, as new sustainable transport connections are brought forward. Site-specific prototyping was undertaken for a specific location between the towns of Haddenham and Thame and the village of Long Crendon. This location presented the potential for excellent rail connections to London and Oxford, and integration of East West Rail and expressway road links to Cambridge.

Review was undertaken of emerging infrastructure proposals for the Oxford to Cambridge corridor, and for areas with potential population growth in existing poles of activity with proximity to smaller existing communities and currently unpopulated areas. New connections were drawn between historic and contemporary patterns of urban growth in Oxford and Cambridge. Historic new town and garden-city planning principles were reviewed, particularly with reference to underpinning economic models including land-value capture and endowment building, to support long-term maintenance and the management of community facilities.

The proposals focussed on essential challenges facing the UK, including how to accelerate the supply of affordable homes without sacrificing the quality of the environment, and how to engage and enthuse the public.

METHODOLOGY



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33 (previous) Mid-Vale Archipelago, 2017. Abstracted proposal diagram showing relationship between existing town-, village- and hamlet-scale settlements, and sites for new interventions.

34 Mid-Vale Archipelago, 2017. Axonometric view showing concentration of development around enhanced railway infrastructure.



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35 Mid-Vale Archipelago, 2017. Axonometric view showing co-located civic and community infrastructures.



36 Mid-Vale Archipelago.
Landscape montage,
notional date 2022.





37 Mid-Vale Archipelago.
Landscape montage,
notional date 2050.



38 (overleaf) CGI of Waterbeach masterplan, Cambridgeshire. View looking south towards Cambridge.





4. Consultation and engagement with existing communities living in proximity of the site and across Oxford, Oxford City Council, Oxfordshire County Council and representatives of numerous statutory bodies

As the largest strategic project undertaken within the city of Oxford over the past 100 years, with significant physical, economic and social impact, it has been essential to undertake a substantial process of consultation and engagement with existing communities and stakeholders to shape the masterplan process. The 2015 policy for the site by Oxford City Council was the product of a detailed evidence base, including consultation originally undertaken to justify the designation of the land through the creation of an Area Action Plan. Masterplan consultation was therefore not the start of engagement activity but the continuation of an ongoing process, albeit with the distinction that it was being undertaken to support development proposals and a planning application reflecting land ownership rather than city council policy.

Major public exhibitions were held at a large hotel adjacent to the site and in Oxford Town Hall shortly before submission of the planning application. A digital engagement platform entitled Commonplace was also deployed to reach a wider, more diverse audience. In the early stages of the design process, detailed briefing meetings and consultation events were held. Extensive dialogue has been held throughout design development with representatives of statutory bodies and other scales of governance, including Oxfordshire County Council, Highways England, Oxfordshire Local Enterprise Partnership, Historic England and Wolvercote Neighbourhood Forum.

Five key issues arose from the consultation process and were addressed in response:

1. Traffic and sustainable transport

Issue: Severe highways congestion and the need to support modal shift at a local and city scale.

Response: Significant reductions in car parking standards compared to current market expectations, with 850 electric car sharing points and a maximum total number of cars set at one per 50 m² of employment floorspace; creation of new dedicated bus and cycle lanes on the A40 and A44; and connections to Oxford Parkway rail station.

2. Visual and townscape impact

Issue: Impact on views from historically open meadow landscapes and the heritage-protected city centre.

Response: Extensive testing and iterative adjustment of height parameters across the masterplan area in response to identified key viewpoints; strategic design principles for future roofscape form; and building materials, colours and tones.

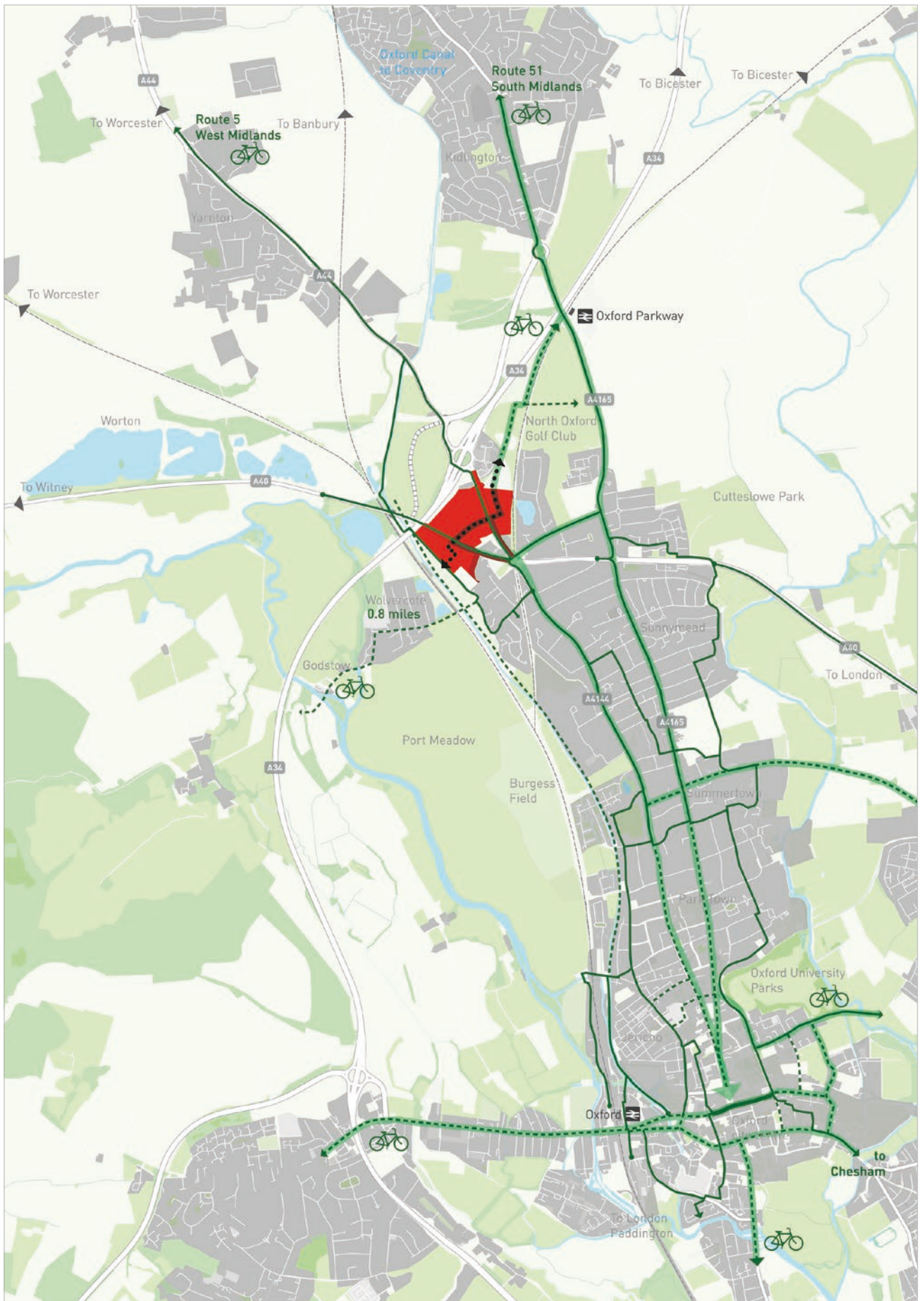


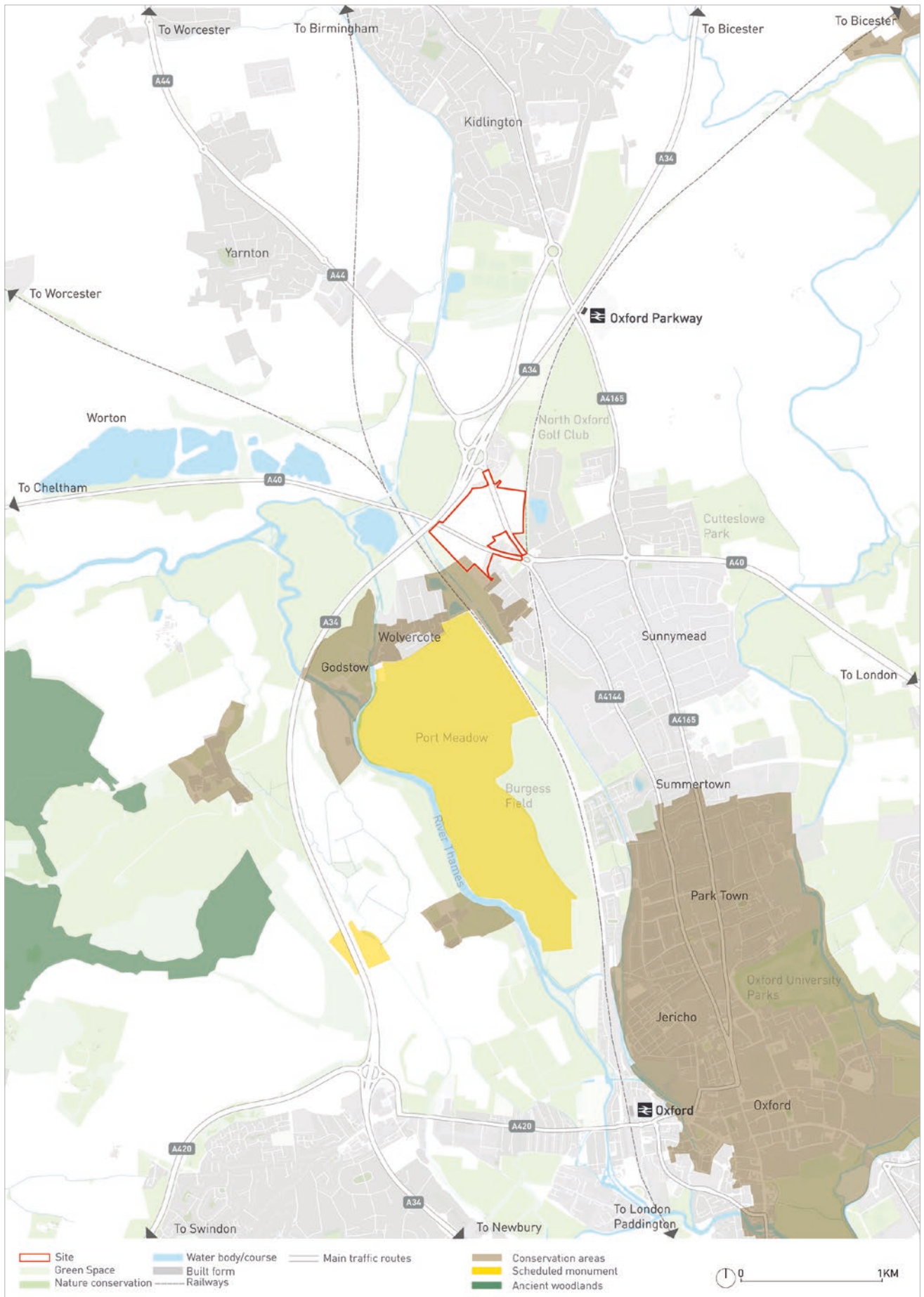
39

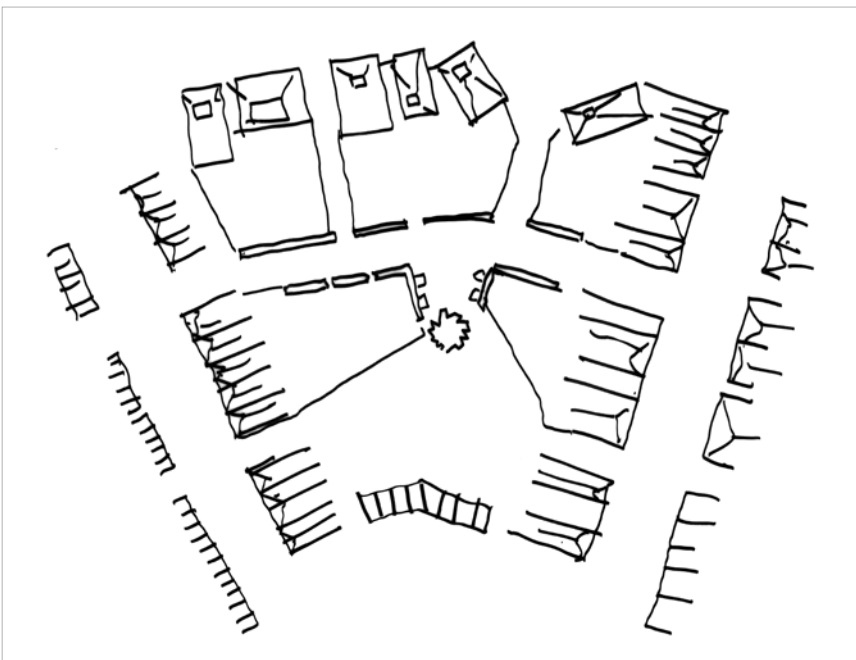
39 *Oxford North* public exhibition, Oxford Town Hall, 2018.

40 (overleaf) City-scale diagram showing relationship of site to networks of expanded cycle infrastructure.

41 (overleaf) Diagram showing areas of conservation and heritage protection around the site.







43



42

42 Typical photomontage study showing the visual impact of illustrative buildings (white) and parameter limits (red) from beyond site.

43 Abstracted diagram exploring roofscape orientation in relation to formal street and space frontages.

3. Energy and air quality

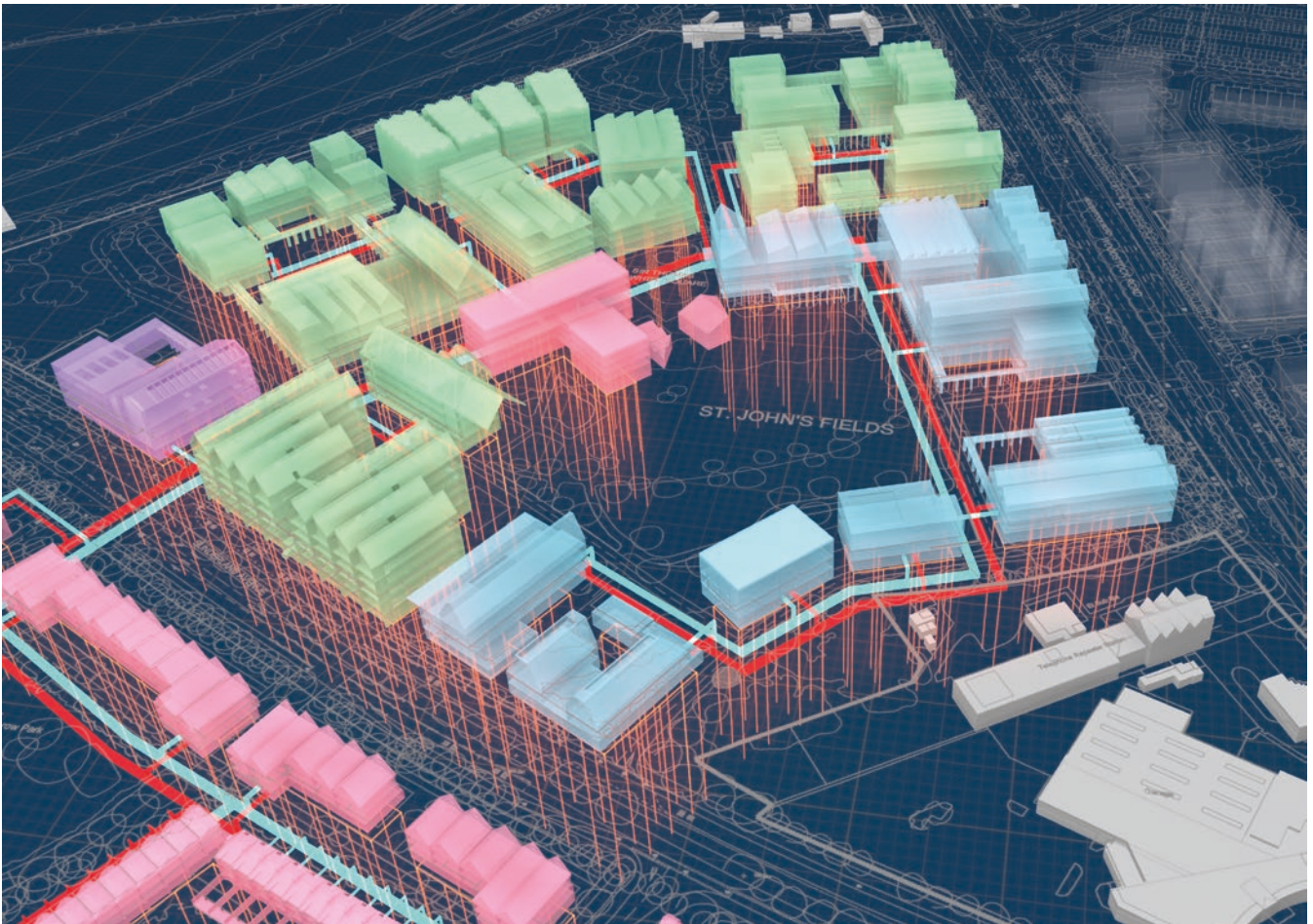
Issue: Development needs to respond to the climate crisis and significantly reduce carbon in the built environment; poor air quality onsite, particularly in immediate proximity to busy roads, with the risk that new development will worsen the situation.

Response: Creation of combustion-free energy sharing loop for the first phase of development, saving 21,000 tonnes of CO₂ compared to a conventional system, using a grid of 450 closed-loop co-axial boreholes and elimination of central energy centre plant; commitment to sustainable travel modes, especially new bus and cycle provision, onsite and strategically, including almost 10 km of new and upgraded cycle paths.

4. Housing need and affordability

Issue: Oxford has some of the most extreme housing costs in the UK due to a sustained demand and a lack of supply, with pressure across all tenure, size and type of home. There is a concern that new development will worsen rather than ameliorate the problem.

Response: Provision of nearly 500 homes (the maximum allowed by policy for a site in an employment-led location) and a commitment to between 35% and 50% affordable housing within the masterplan.



44 Energy sharing loop diagram overlaid on masterplan digital model.

5. Character and identity

Issue: The character and identity of a new district of a historic city set immediately adjacent to heritage-protected open landscape and predominantly residential districts created by urban expansion in the nineteenth century. The need to find appropriate expression for new typologies and mixes of functions reflecting contemporary forms of research and employment activity.

Response: Extensive exploration of historic urban and architectural growth and change within Oxford, including manufacturing traditions and the role of roofscape and materiality in shaping identity; first phase detailed architectural design developed as proof of concept, and extensive modelling and testing of site-wide illustrative building designs.



45

45 Aerial view of Jericho, Oxford, showing interface of Lucy's Ironworks, terraced housing and open landscape, 1952.

46 Detailed material samples for the first phase workspace buildings.

47 Detailed material samples for first phase Red Hall amenity and incubator building.

48 Detailed material studies for first phase workspace buildings, exploring tonal variation.

METHODOLOGY



46



47



48

Dissemination

Project and Consultation Documents

Numerous published documents are in the public domain:

- Fletcher Priest Architects (March 2019). *Oxford North Design and Access Statement: Vol 1 Masterplan* [reference 180731 DAS V1 00 2]
- Fletcher Priest Architects (March 2019). *Oxford North Design and Access Statement: Vol 2 Phase 1A Detailed Design* [reference 180731 DAS V2 002]
- Fletcher Priest Architects (March 2019). *Oxford North Public Realm Strategy* [TOWN622(08)2001 R0]
- Forty Shillings (July 2018). *Oxford North Statement of Community Involvement* [180731 SCI 001]
- Savills (March 2019). *Oxford North Environmental Statement Non-Technical Summary*
- Townshend Landscape Architects (March 2019). *Oxford North Public Realm Strategy – Phase 1a* [TOWN622(08)2002 R0]

A project website was established during planning consultation stages and has remained live and updated for ongoing communication: www.oxfordnorth.com

A digital engagement platform has been created to reach a wide and diverse audience for consultation: <https://oxfordnorth.commonplace.is/>

Speaking Events

- Beijing Institute of Architectural Design, London (2019)
- Mad City Riga (2019)
- Tianjin Urban Planning and Design Institute, London (2019)
- England's Economic Heartland, Silverstone (2018)

Public Exhibitions

- *Oxford North*, Oxford Town Hall and Jury's Inn Hotel, Oxford (2018)
- *Summer Exhibition 2018*, Royal Academy of Arts, London (2018)
- *Connecting for the Future: Exhibition of Ideas*, Transport Systems Catapult/NIC, Milton Keynes (2018)
- *Oxford North*, Jury's Inn Hotel, Oxford (2017)

Project Highlights

Oxford North is the largest strategic project undertaken in the city of Oxford in the past 100 years, supporting world-leading research and the creation, incubation and growth of knowledge-intensive employment. It is projected that the completed project will contribute £150 million per year to the Oxford economy in gross value added, and more broadly support a key element of UK economic strategy.

In recognition of its strategic importance for the city and planned growth of the Oxfordshire economy and the Oxford-Cambridge corridor, significant public funds have been made available to support the scheme: Oxfordshire Local Enterprise Partnership (OxLEP), Oxford City Council and Oxfordshire County Council secured £5.9 million from central government's Local Growth Fund, with a further £10 million of funding provisionally secured by Oxford City Council from Homes England.

Oxford North contributed to three successful competition entries for the author's practice: Building Design Architect of the Year Awards 2020 (shortlisted), Building Design Masterplanning & Public Realm Architect of the Year 2017 (shortlisted) and The Oxford to Cambridge Connection: Ideas Competition set by the National Infrastructure Commission in 2017 (finalist).





49 Red Hall model at the Royal Academy of Arts Summer Exhibition 2018.

50 (overleaf) CGI of masterplan showing elevated view looking south over the A34 highway, with historic city centre on the horizon.










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51 (previous) Nighttime CGI of masterplan showing elevated view from above the A34, looking south and west towards the city centre and Port Meadow.

Related Publications by the Researchers

Thomas White Oxford, Spacecraft Consulting and NextBigThing (2018). *Exhibition Boards: Oxford North*. 

Fletcher Priest Architects with Bradley Murphy Design and Peter Brett Associates (2017). 'Mid-Vale Archipelago'. *The Cambridge to Oxford Connection: Ideas Competition*. National Infrastructure Commission. 

Related Writings by Others

NIC (2017). 'Shortlist Announced in "Growth Corridor" Ideas Competition'. *National Infrastructure Commission*. 22 August. 

Fulcher, M. (2017). 'Finalists in Cambridge-to-Oxford Growth Corridor Competition Revealed'. *Architects' Journal*. 22 August. 

The Economist (2017). 'Bricks and Mortar Boards: Oxford University Turns its Hand to Property Development'. *The Economist*. 

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Founder of the series and lead editor:
Yeoryia Manolopoulou

Edited by Yeoryia Manolopoulou,
Barbara Penner, Phoebe Adler

Picture researcher: Sarah Bell

Additional project management:
Srijana Gurung

Graphic design: Objectif

Layout and typesetting: Siân Hughes

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