

LOVABLE & LIVABLE ICKNIELD: A **SHARED** NARRATIVE OF URBAN RE-GENERATION

SUDes, MASTER THESIS PROJECT
LUND UNIVERSITY, SEPTEMBER 2018

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To city of Birmingham...



"Only architecture that considers human scale and interaction is successful architecture..."

Jan Gehl

"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody..."

Jane Jacobs



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Abstract

Icknield Port is one of the largest redevelopment sites in Birmingham, UK and presents a huge opportunity to create a high quality destination of metropolitan significance. Because of its size (30 ha), its locational advantage (1.4 km from city centre) and its unique waterfront attributes, the site offers great potential to meet the aspirational goals of major landowners, future users and the City Council.

Icknield Port forms part of the route of the original Birmingham Canal and is surrounded by predominantly industrial uses. The buildings and character of the area remain relatively unchanged since the economic growth following the industrial revolution. The area nowadays, however, has many buildings vacant or underused, sometimes with large warehouses being used solely for car parking or storage purposes. The majority of the old buildings is now no longer suitable for modern manufacturing methods.

This student project aims to generate a range of mixed-use developments, which vary in scale, volume and function. The main axes of Icknield's regeneration would be its natural heritage and landscape, cultural adaptation, and social inclusion. The analysis and strategic stages of this project have been explored and materialized after three-month-long participatory processes. Subsequently, public opinions have shaped the planning philosophy as well as the design outcomes of this project.



TO - PLANNING ANALYSIS



Urban analysis

With a population of just over 2.5 million and an economic output of £40 billion per year, Birmingham is the West Midlands regional capital and the UK's second largest city, with an ever-increasing international standing.

Birmingham is a strategic location at the centre of the national motorway network and at the heart of the UK rail network. The city attracts 33 million people a year for business and pleasure, and has an International airport that is a 9 minute train journey from the city centre.

It also has a workforce of over 1 million employed across a wide range of sectors. It is continuing to diversify its economic base attracting investment from new science and technology based industries and is a designated Science City and a Digital City.

There is an expanding creative industries' sector which boasts over 5,000 businesses representing 10% of the city's total firms.



Figure 3: Paradise Circus, Birmingham

Historical timeline

1942

1960s

Industry flourishes, workers needed

1980-90s

Neoliberal policies bring about deprivation and unemployment. Old industrial sites remain inactive. Unattractive city...

2010s

Urban regeneration

Birmingham has the youngest profile of any in Europe with 37% of the population under 24 years of age and is the second most ethnically diverse population in Europe.

The city has a strong education and learning base represented by three major universities with a total of 65,000 students.

More than one fifth of the city consists of open space including parks, nature reserves, allotments, golf courses and playing fields. Many of these areas are linked by rivers, watercourses and canals forming an inter-connected network.

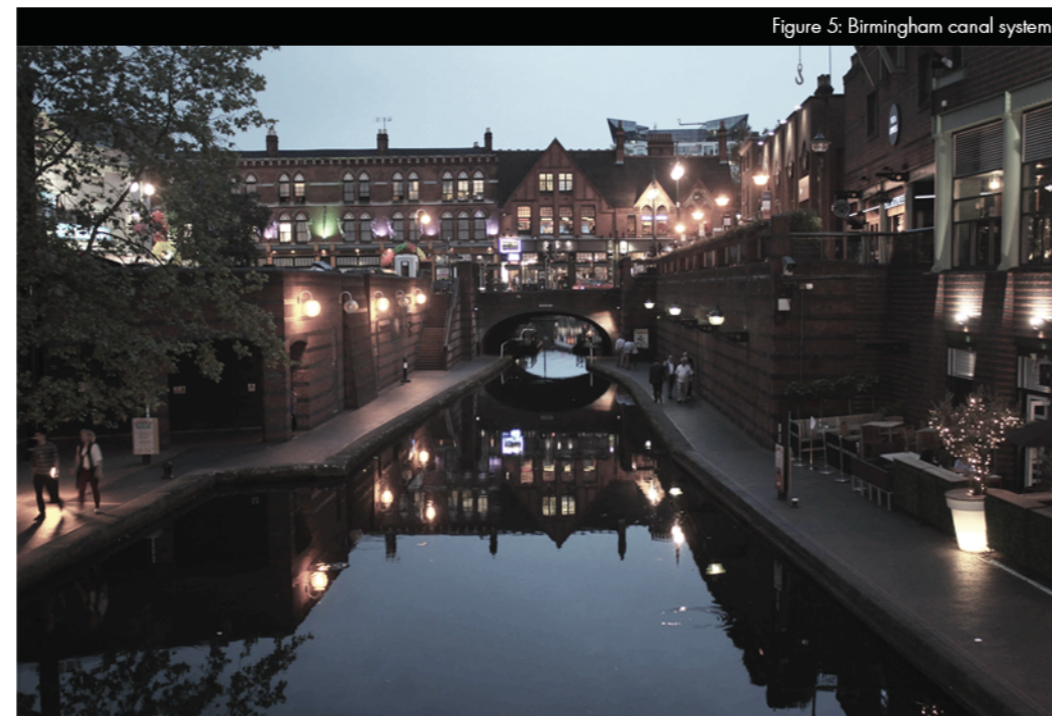
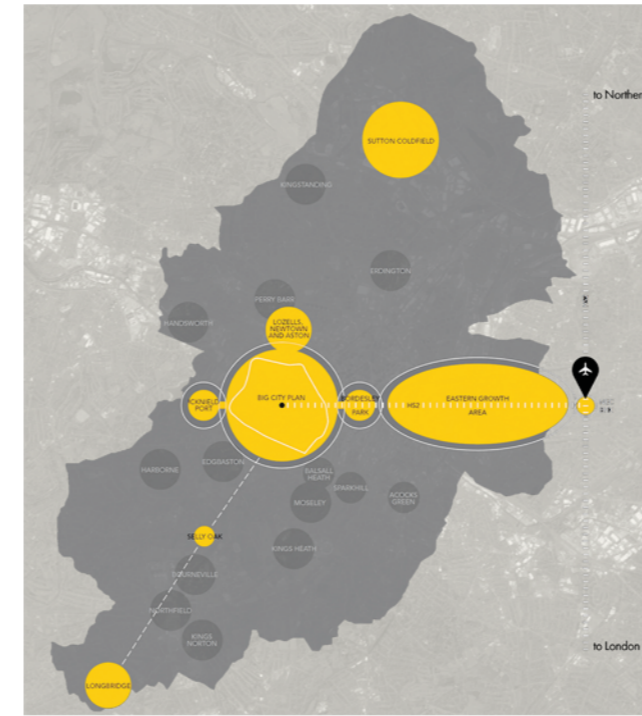


Figure 5: Birmingham canal system



Big City plan

Big City Plan, is about delivering transformational change in Birmingham centre by supporting sustainable growth, creating new and improved public spaces, giving streets back to pedestrians and bringing the cultural life of Birmingham to the heart of the city. The Big City Plan City Centre Masterplan is being produced as a regeneration framework for Birmingham's city centre.

The key principles of this masterplan will be embedded in the Council's Core Strategy - the statutory planning document that will provide the vision and overarching direction to guide the future development of the whole city. The regeneration of the city centre, seeing it grow to cover 800 hectares of the city is set within the context of the wider transformation of Birmingham. Over the next 20 years the city will:

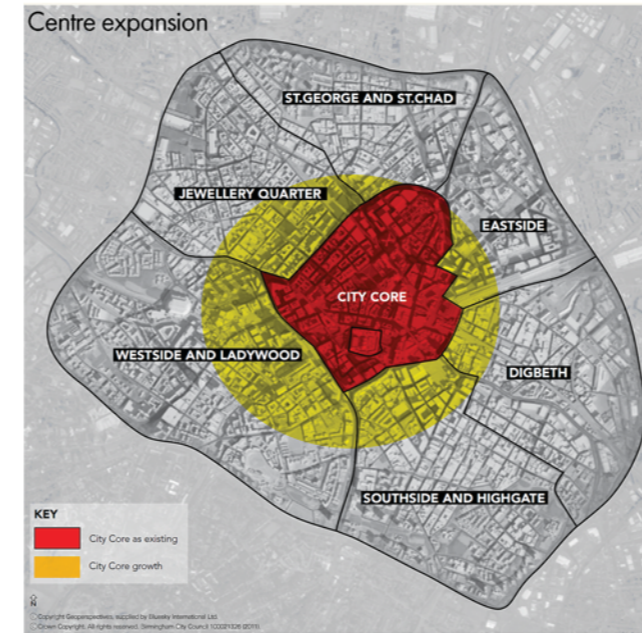
- Grow its population by 100,000.
- Create new jobs to meet the needs of its growing population.
- Significantly improve its connectivity to the rest of the region and beyond.
- Deliver a transformation of the physical environment.



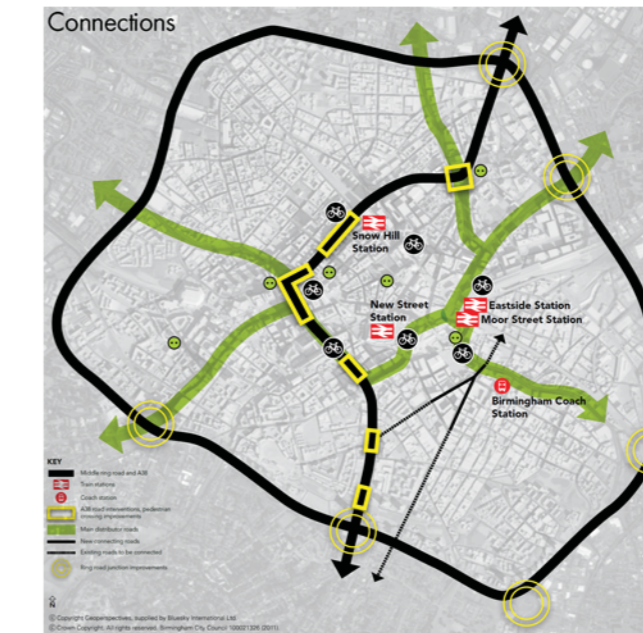
Figure 4: Community park, Birmingham



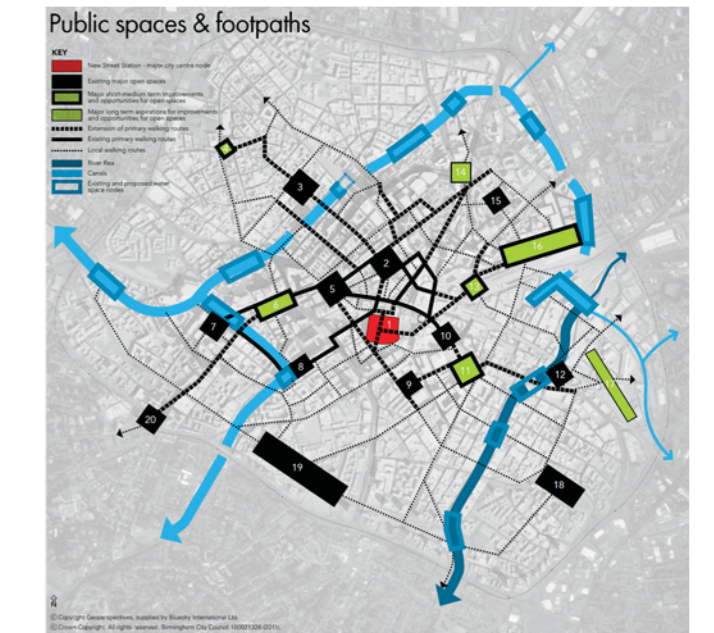
Figure 6: Oozells square, Birmingham



Centre expansion



Connections



Public spaces & footpaths

Site analysis

Icknield Port is strategically located to the immediate west of Big City Plan within easy walking and cycling distance of significant employment, leisure and retail opportunities. Greater Icknield has a strong industrial history evidenced by the presence of canals and Edgbaston Reservoir alongside a number of other heritage assets.

Icknield Port is a regionally significant development site, given its size, edge of City Centre location and consolidated land ownership. It is centred on a canal loop that offers waterside development opportunities adjacent to the major recreational asset of Edgbaston Reservoir, and adjoins the Ring Road. It is largely surrounded by attractive, mainly Victorian residential neighbourhoods including Summerfield - Birmingham's first eco-neighbourhood.

Currently, the site comprises many underused industrial buildings (brownfields) and vacant land. It also lacks footpaths or cyclepaths in spite of its significant cultural value. To make matters worse, central spots are incrementally turning into storages or even lorry parkings thus blocking physical and visual access for visitors.

Figure 7: Icknield Port, view from Edgbaston Reservoir



Figure 8: Icknield Port aerial view



Figure 9: Current situation - old industries, canal and debris



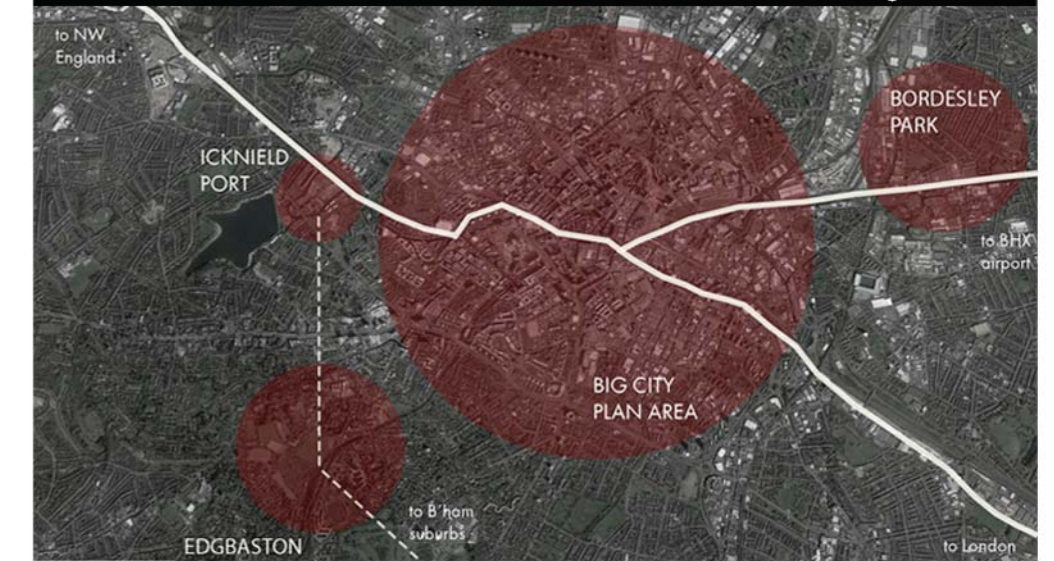
The site has tremendous industrial background, given the number of factories once operating there. Currently, there are about 15 formerly industrial buildings that can be overhauled and 7 more, which are in derelict state. Thus, the site could possibly exemplify urban regeneration via adaptive re-use.

Lastly, the place is really famous for its water resources: fantastic development opportunities arise around Icknield's canals and along Edgbaston Reservoir. These maps that follow illustrate the current condition, both in and around Icknield Port.

Existing spatial conditions at Icknield



Site location in relation to Birmingham context



Site location in relation to surroundings

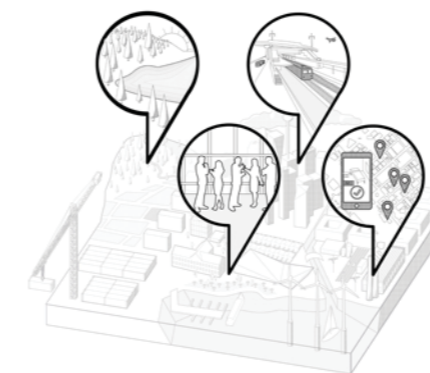




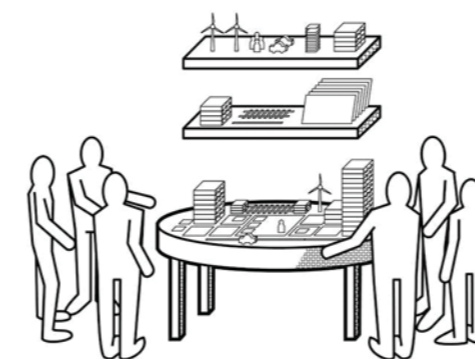
Participatory urban design & planning



Step 1 - Define stakeholders



Step 2 - Communicate



Step 3 - Co-design

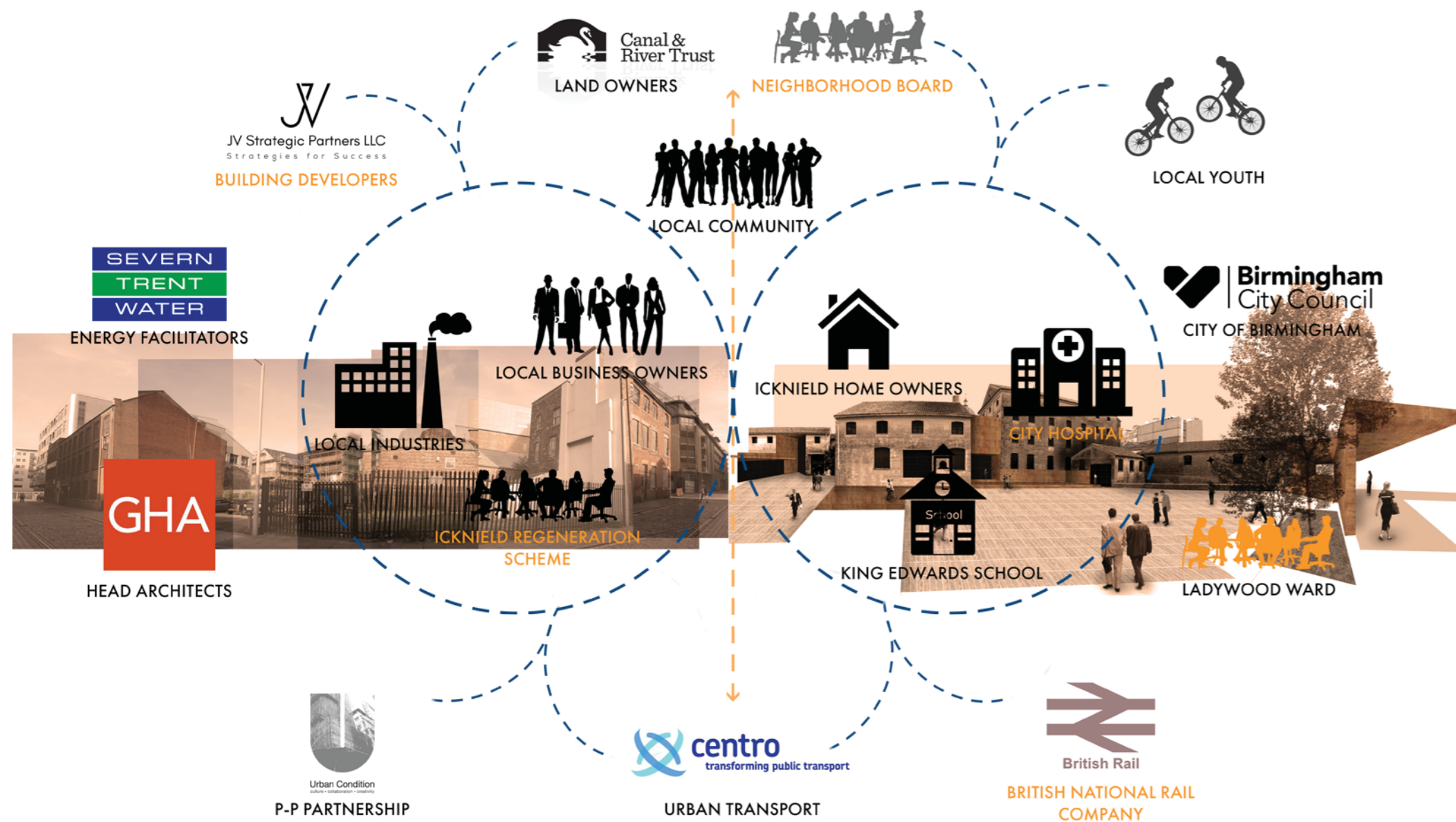
Over the last decades a new generation of cities and urban planning paradigms have emerged. Dynamic urban development “is” the 21st century. As master planning falls out of favor, city makers are calling for more effective and collaborative methods. Complex issues can be made accessible to a large number of people; both experts and non-experts.

Firstly, key stakeholders are identified, both visible and hidden. Key stakeholders can be land-owners, municipalities, public and private organizations, project developers, etc. In other words, anyone who would be somehow affected by an urban project is considered potential stakeholder for the study site.

Then, the designer/planner attempt to communicate with those stakeholders. This can be in the form of a field survey and personal interviews, and is regarded to be a fundamental part of the bottom-up process. Thus, stakeholders have fun and engage in the process genuinely. In our day and age, communication could be also done remotely, thanks to digital social networks.

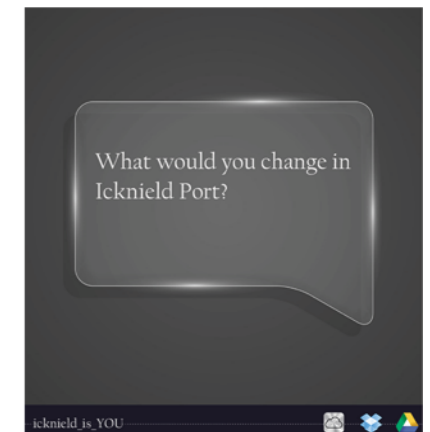
Finally, stakeholders’ views and opinions are being aggregated and often exhibited, hence forming valuable input for the urban designer/planner. In most cases, citizens’ voice would be heard and their vision shapes the forth-coming design strategy. Consequently, there is a bottom-up model of urban negotiation, which transcends the typical “advisory” role for the stakeholders and introduces them to concrete place-making.

Define stakeholders



Communicate

At a next stage, personal interviews were held with many stakeholders. Further, people had the opportunity to get inspired by four collages, each illustrating different versions of Icknield's future. Stakeholders also had an open map questionnaire, on which they were free to share their views and suggestions. Over 100 questionnaires were handed out and filled in.



Co-designing a common future

The final step of this participatory process is the most vital one: people embrace the spatial situation and try to formulate suggestions on regenerating Icknield. This has been achieved either in verbal or graphic way and negotiations with the public were on for three months.

Subsequently, public opinions have been the main and most valuable input for my design procedure. I also managed to solve my initial query regarding how to deal with a place that was rather unfamiliar: local population has been an immense source of information. Furthermore, their ideas on transforming Icknield have infused my planning philosophy and affected general design.

Figure 10: Locals get inspired by collages at Ladywood Ward Centre



Figure 11: People fill in questionnaires about Icknield

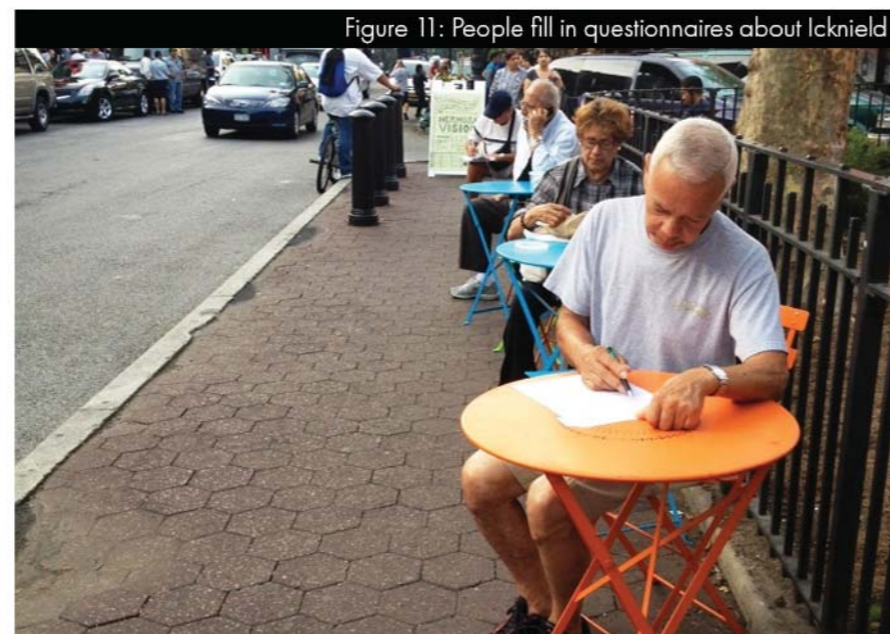


Figure 12: Local youth ready to discuss and suggest



A COMMON VISION: TO TRANSFORM ICKNIELD INTO...
TRULY PARTICIPATORY: LOCALS HAVE THEIR SAY

A livable and lovable place!

We have identified three important and interlinked ingredients of a livable city:

Resilience
focuses on adaptability, flexibility and balance. It is about the ability of a city to re-invent itself through shocks and stresses, to harmoniously accommodate old and new values, and to adapt the functions and requirements of the city. It illustrates a city's capacity to balance continuity with change, heritage and innovation, natural spaces and urban environment to the benefit of its inhabitants.

Inclusiveness
is about creating social integration and cohesion. Inclusive cities are open for participation from the widest range of civil society, irrespective of gender, age, ethnicity, cultural heritage, beliefs, religion and economic status. Inhabitants should have equal opportunities to participate in the activities of a city. Inclusiveness enhances community feelings, the sense of ownership towards the city, and the sense of belonging to a place.

Authenticity
is the ability to maintain the local character of the city, the local heritage, culture, and environment. At the same time, a city needs to accommodate social, economic and technological changes - and evolve itself. This evolution needs to be sustainable and match the expectations of the citizens.


"Housing must go first... Buildings to come have to accommodate people and bring on more convenience stores! Personally, I would exchange my 4-room-apartment to a villa with a large garden to hold my bbq gatherings and get some space to park my car."

"I would love to have more open space to play around. We need more trees, because they reduce car emissions and it is good for our health! My parents also would like to be able to work closer to our house because they commute a lot during weekdays"


"Icknield Port is boring... It is genuinely the most colourless area in the city. I live close but never walk through... No cafes, no pubs, no music... How can you tolerate such a miserable place? It would be nice to find a cool spot to hang around, but do you see any?"

"I live in a private house near the Reservoir. The whole place has been turned into a landfill over the years; an eyesore for the locals. Long before its industrial functions my grandmother used to plant flowers by the water, so why not replicate the past? More public facilities have to be established."


"This place is really stimulating; it comprises cultural heritage and natural landscapes. Abandoned factories can be overhauled and re-used. The canal system is also an upside. There is vacant space for new uses to come in. Icknield Port can grow in line with Birmingham city centre and facilitate an emerging urban hot spot."




Andy, 51
Industrial worker




Sharwin, 9
Student



Ben, 20
Animator



Lara, 65
Pensioner



Demi, 30
Architect

Design policies driven by public vision

As a matter of fact, participants' suggestions have shaped my strategy toolbox, whose main axes have been resilient urban landscapes, inclusive open spaces of diverse functions & users, and authentically adapting to regional context & historical background. Some of these views are presented as follows:

AUTHENTIC

An authentic place can create a sense of **pride** and **belonging**. "This is my hood". It can make a place lovable as well as livable.

Resilient cities need **economic stability**. They should strive for economic diversity to reduce dependence on one economic model and create new jobs.

RESILIENT

Plurality in form and volume is a main feature of an authentic place. Various houses are used to accommodate different needs. **Semi-private** places enhance inclusiveness and sense of neighbourhood.

The industrial history of Icknield makes it authentic. It reflects **local culture**, and reinforces a sense of place and the local identity.

INCLUSIVE

Natural heritage is important for authenticity as it creates a collective memory. Native species emphasize the unique location of a place. Parks improve air quality and public health.

Livable places need **ecological resilience** with a low carbon and environmental footprint. They need to consider energy, food, water and materials.

ICKNIELD

Resilient cities realize that they must stay interdependent as well as **connected** within a system of other cities and also with the rural environment surrounding them.

PORT

The relationship with the surrounding rural area is important for resilience. Food supply and **urban agriculture** need to be considered.

A well-designed, inclusive place implies social cohesion and breeds tolerance between citizens. A network of diverse **public and semi-public** places emphasizes inclusiveness.

RESILIENT

Everyone in Icknield is included, has **rights**, and is entitled to a better life. The elderly, disabled or poor are seen as potentially valuable **social capital**.

DESIGN QUALITIES TOOLBOX

RESILIENCE

WATER HARVESTING
Grey water, Small rain gardens, trees

URBAN HORTICULTURE
Cultivation, Greenhouses, Gardening

BUILDING RECYCLING
Recycle, Reuse, Upgrade, Reuse, Reuse, Reuse

JOB CREATION
£

INCLUSIVENESS

BUILDING DIVERSITY
Private villas, Rowhouses, Mixed residential (housing, commerce), Mixed blocks (housing, commerce, offices, culture)

SOCIAL INTEGRATION
Older couples, Families, Teens/young adults, Professionals, Visitors

PUBLIC SPACE PLURALISM
Urban Farm, Courtyard, Street market, Pavilion, Sports Courts, Outdoor meeting areas, Urban green, Public stairs, Playgrounds, Wet Zone

ALTERNATIVE ENERGY
Solar lighting, Electric car parking

AUTHENTICITY

EMBRACE INDUSTRIAL HERITAGE
Turning Icknield's brownfields... into cultural uses and public plazas

ADAPT TO TOPOGRAPHY & HYDROGRAPHY
Birmingham canal system, Edgbaston Reservoir

RESPECT PHYSICAL CONTEXT
Neighbourhood feeling, Urban character

STRAIGHT OUTTA BIRMINGHAM

ICKNIELD PORT: a district for everyone!!!

PURIFY CULTIVATE PLAY SHOP WORK MEET-UP CONTEMPLATE REGENERATE DWELL

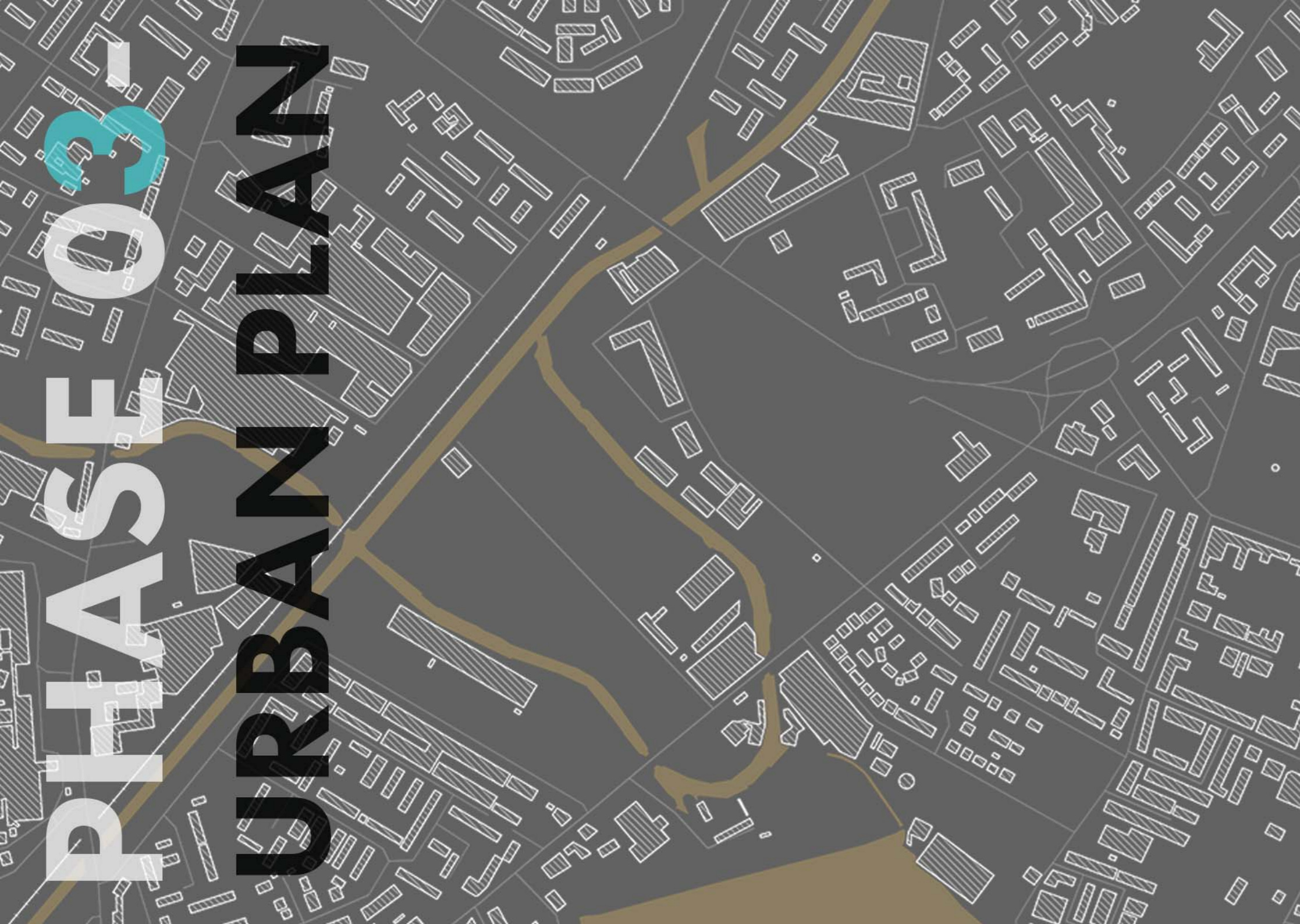


Diagram 1: Participants review (spatially aggregated)



Diagram 2: Urban structure (according to participants review + designer's choice)



A genuinely bottom-up process of designing urban space

Apart from the previously described theoretical context that has been shaped by public views and opinions, this study has totally taken into account participants' spatially-specific reflections on how future Icknield should be developed.

Firstly, spatial data, which was collected by open questionnaires, has been aggregated and edited via GIS analytical methods (network analysis and hot spot-cold spot analysis). Thus, I was able to comprehend and graphically combine public-led spatial initiatives (Diagram 1). For instance, the majority suggested that canals should be accessible and open for the public. In addition, most of participants proposed a network of green spaces running through Icknield.

Next, an urban structure plan (Diagram 2) has been created in accordance to Diagram 1. Spatial and functional analogies are quite clear in this case: private uses (maily, residential areas) would be developed at the periphery of Icknield Port, while shared functions are planned to be implemented at inner core, and especially around canals. Furthermore, open public spaces would form a network that should be able to bring people in site, either from adjacent residential areas or Birmingham city centre.

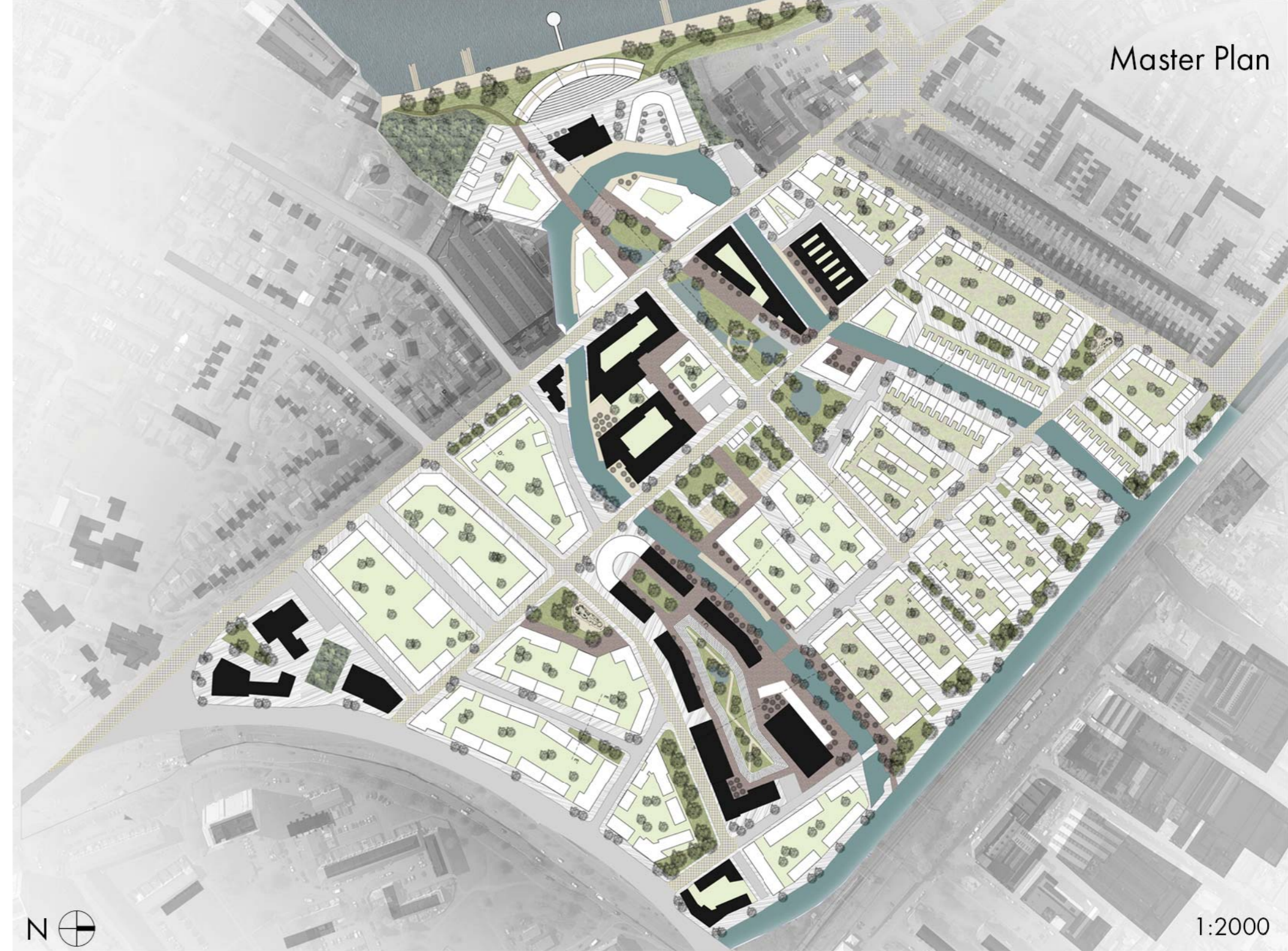
Finally, Icknield's proposed master plan adds extra layers of information regarding circulation, old and new building forms, public space typology, etc. Most importantly, it has been produced after democratic processes and evolutionary urban planning, which allowed incremental and participants-inspired interventions to be followed.

PUBLIC SUGGESTIONS QUESTIONNAIRES

DATA COLLECTION & AGGREGATED PLAN

ANALOGUOUS SITE STRUCTURE PLAN

SHARED MASTER PLAN



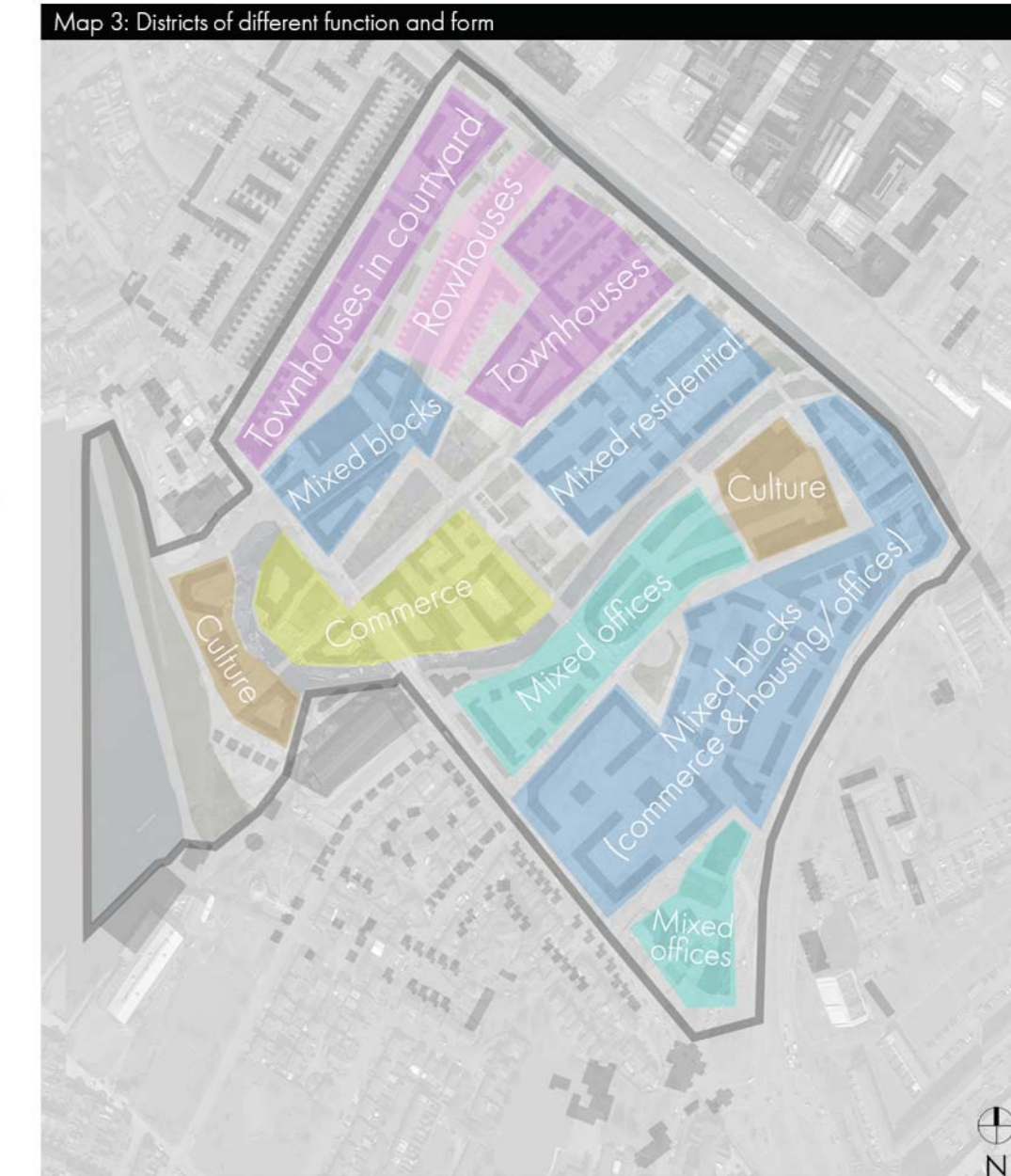
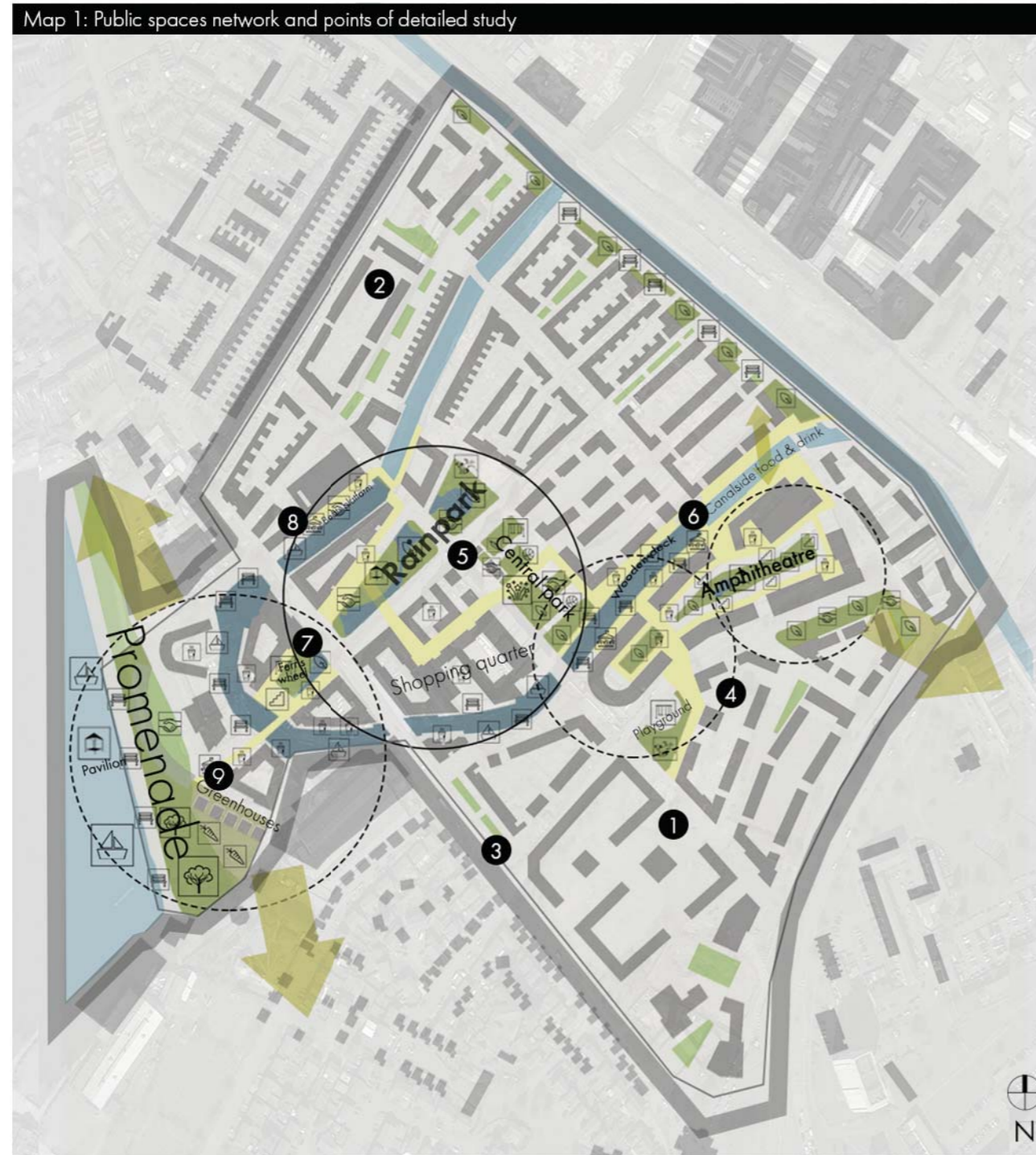
Performative plans

Performative plans describe the way proposed interventions plan to transform Icknield Port. Public spaces networking, extra public transport stops and new building uses have been deployed in accordance with people's opinions, as reflected on previous diagrams.

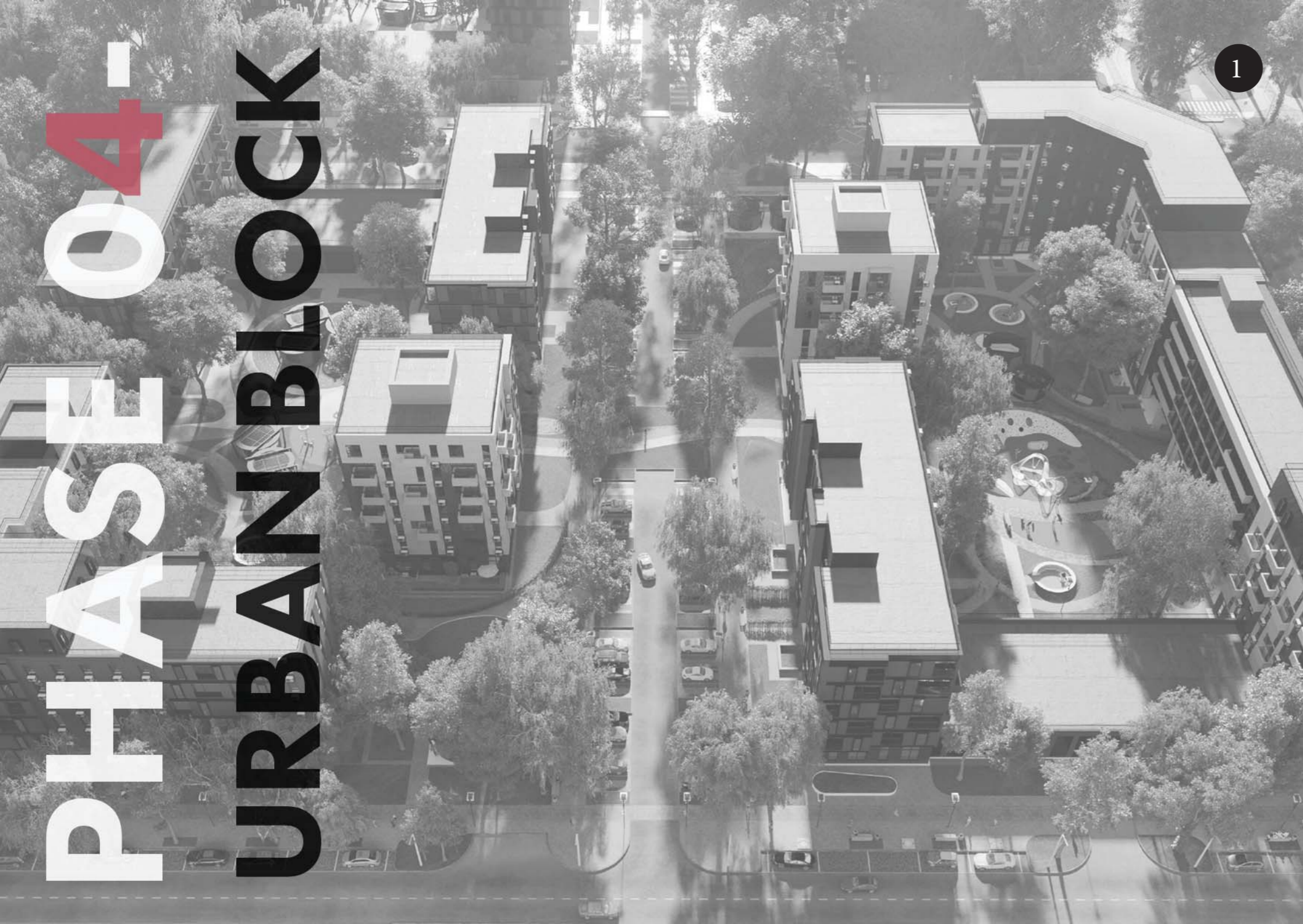
Map 1 illustrates the proposed central core of Icknield in conjunction with various public space functions. It is thereby obvious how the site can be connected to its context through a network of public areas. It also informs on points of interest that have been further studied afterwards.

Map 2 includes all the spatial information related to street hierarchy and physical connectivity to adjacent areas. Bus stops can be found as well.

Lastly, the site is conceptually segmented into multiple sub-districts of different function, form and character. Thus, Icknield becomes diverse and capable to facilitate various users' needs. These districts have been depicted on Map 3.

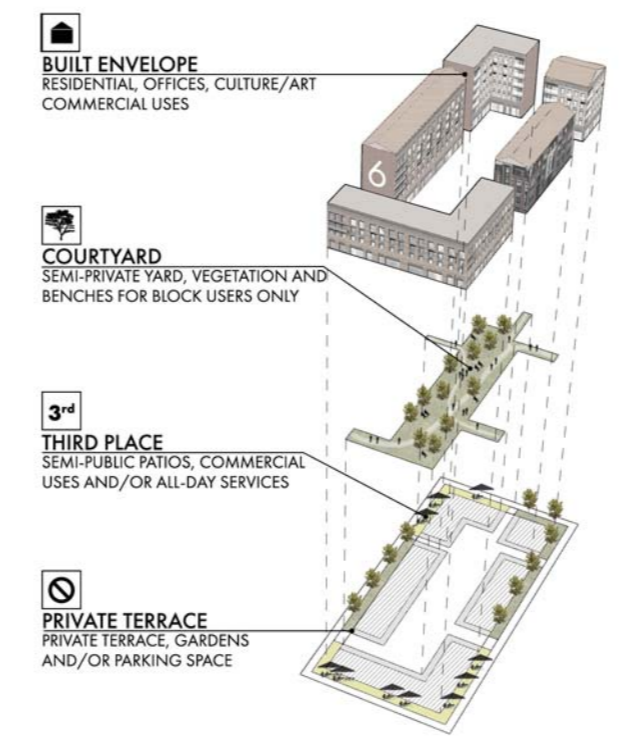


PHASE 4 - URBAN BLOCK



1

Figure 13: Typical block in Ickniel Port, exploded axonometric view



Typologies and functions

Figure 14: Building diversity serve different users with different needs



Figure 15: Urban section, 1:500



Human-oriented neighbourhood design

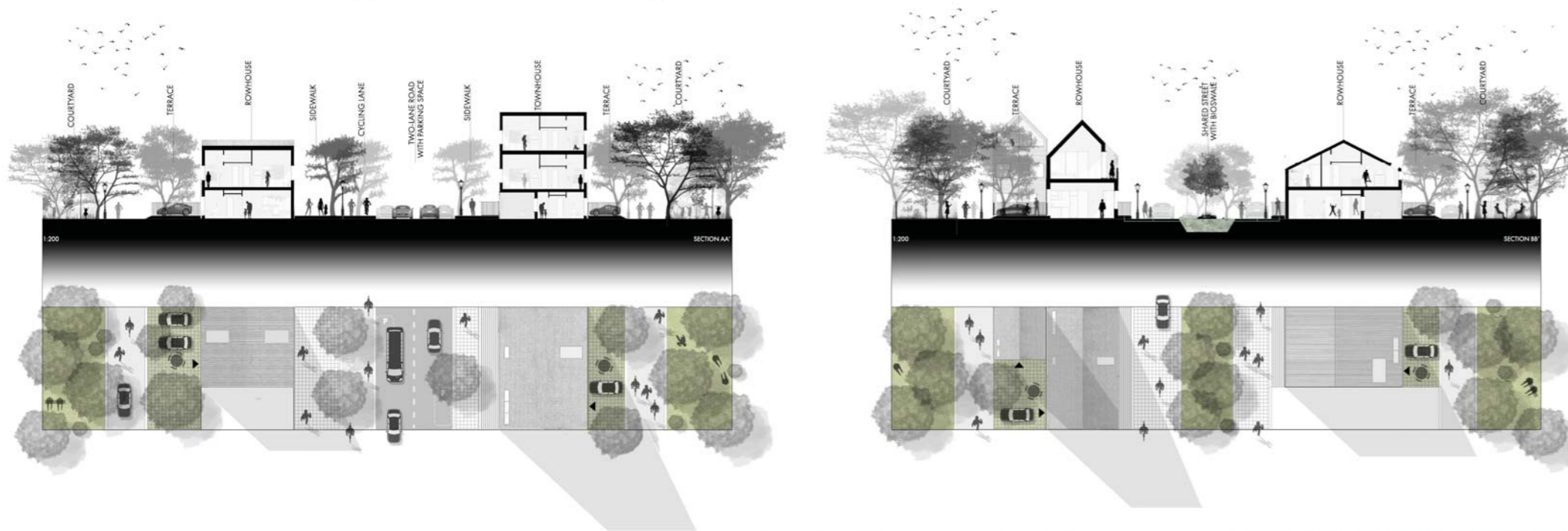


Figure 16: Sustainable and human-scale design can consolidate a feeling of "place-belonging"



Life between buildings

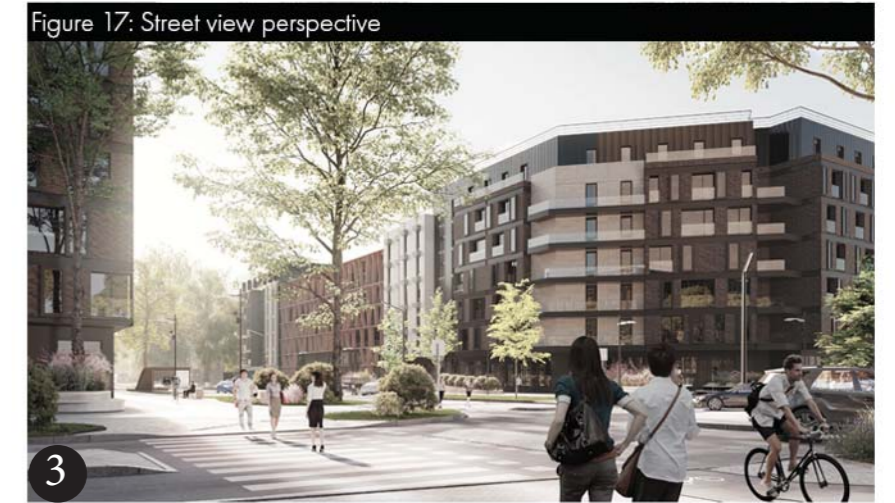
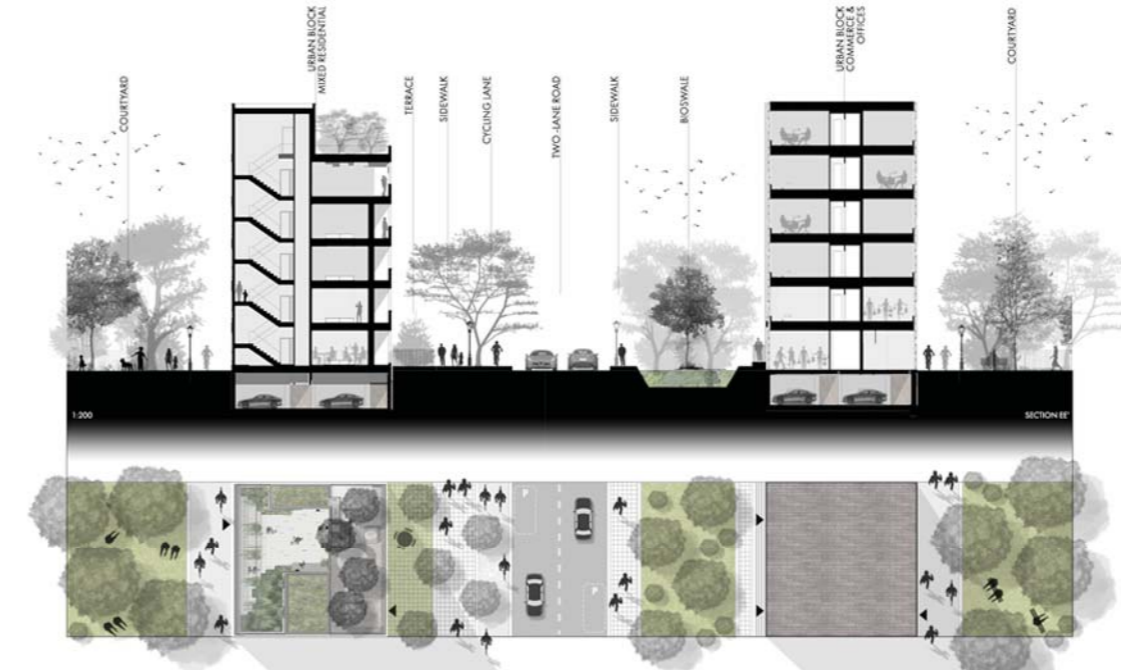
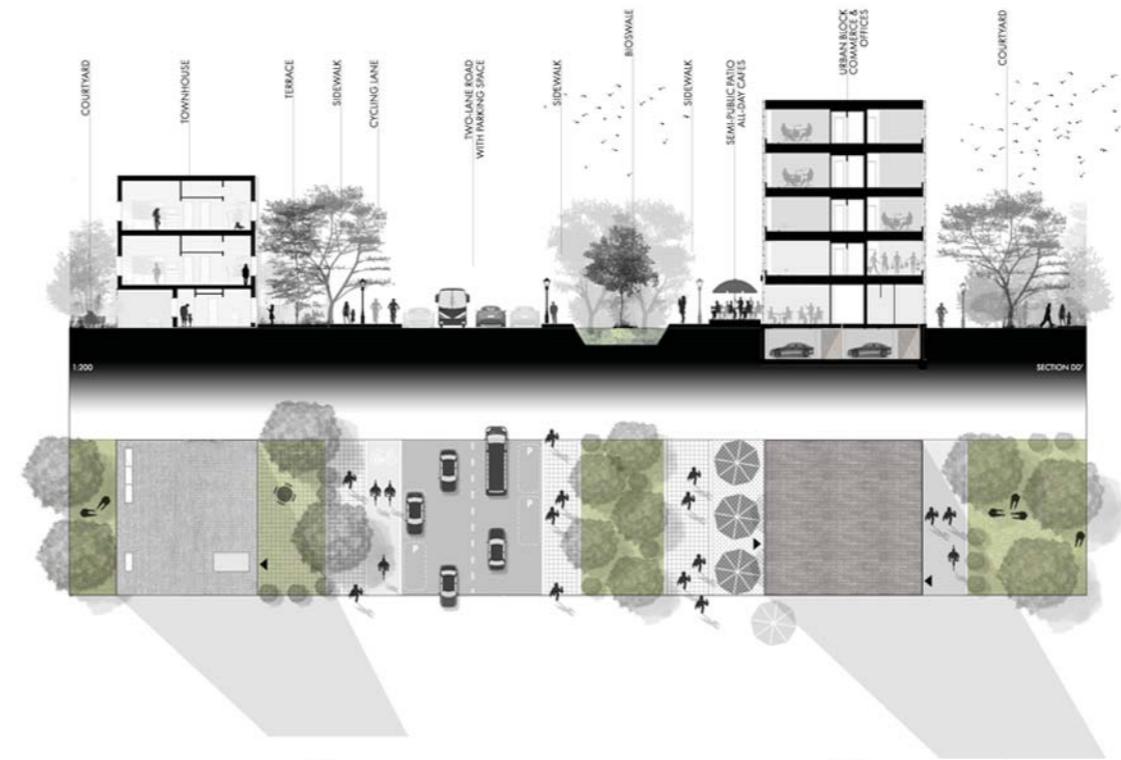


Figure 17: Street view perspective
 "Complete" street typology facilitates car, bike and pedestrian traffic on separate lanes, and also includes a green layer for rainwater treatment purposes. "Shared" streets mix bikes with pedestrians and car traffic at a maximum speed of 15 km/h. In our case, shared streets have been used between urban blocks while complete streets connect Icknield to its surroundings and carry bus transportation across our site.



Figure 18: Inner courtyard of a typical urban block in Icknield
 Courtyards, terraces and patios are of greatest importance to this project. They constitute semi-public (third) or semi-private places, in which people could meet and socialize. Regardless their level of privacy, they all serve as nature patches between buildings or open spaces in front. In a few cases, terraces offer intimacy and isolation, especially when it comes for rowhouses or townhouses, thus adapting to the greater surroundings (urban villages of Edgbaston and Ladywood).





Inspiration from context: examples of multi-functional public attractions in Birmingham

Just like in Birmingham, Icknield plans to develop open spaces of diverse characteristics. In other words, it may be possible for a rainpark to co-exist with temporary pavillions or street cafes to be found opposite public gardens and game-plazas. As a result, Icknield's public spaces would be active all day long and facilitate a wide range of visitors. Furthermore, the site would thereby replicate Birmingham's design style and adapt to its context, in terms of nature as well as culture.

Figure 19 - Centenary plaza: Ferris-wheel and temporary ice skate



Figure 20a - Paradise Circus: urban gardening meets public stairs



Figure 20b - St Paul's square: traditional cafes around a city park



Typologies and functions

Figure 24: Mixed typologies of proposed public spaces with hard surface in Icknield, axonometric view

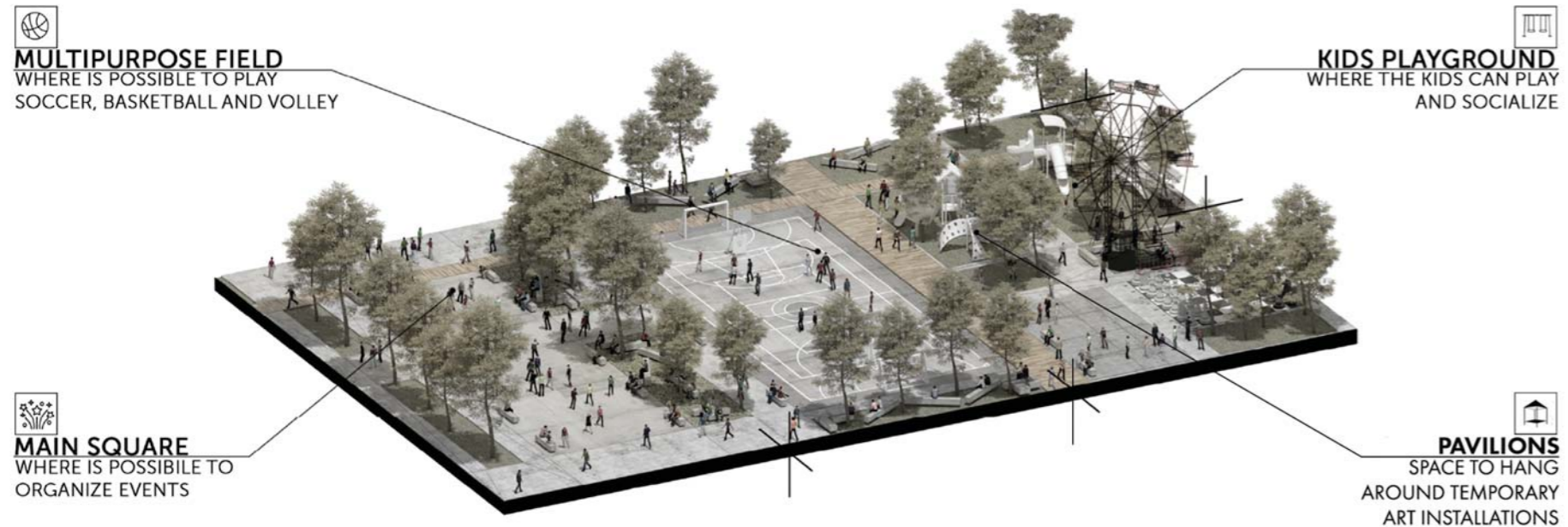
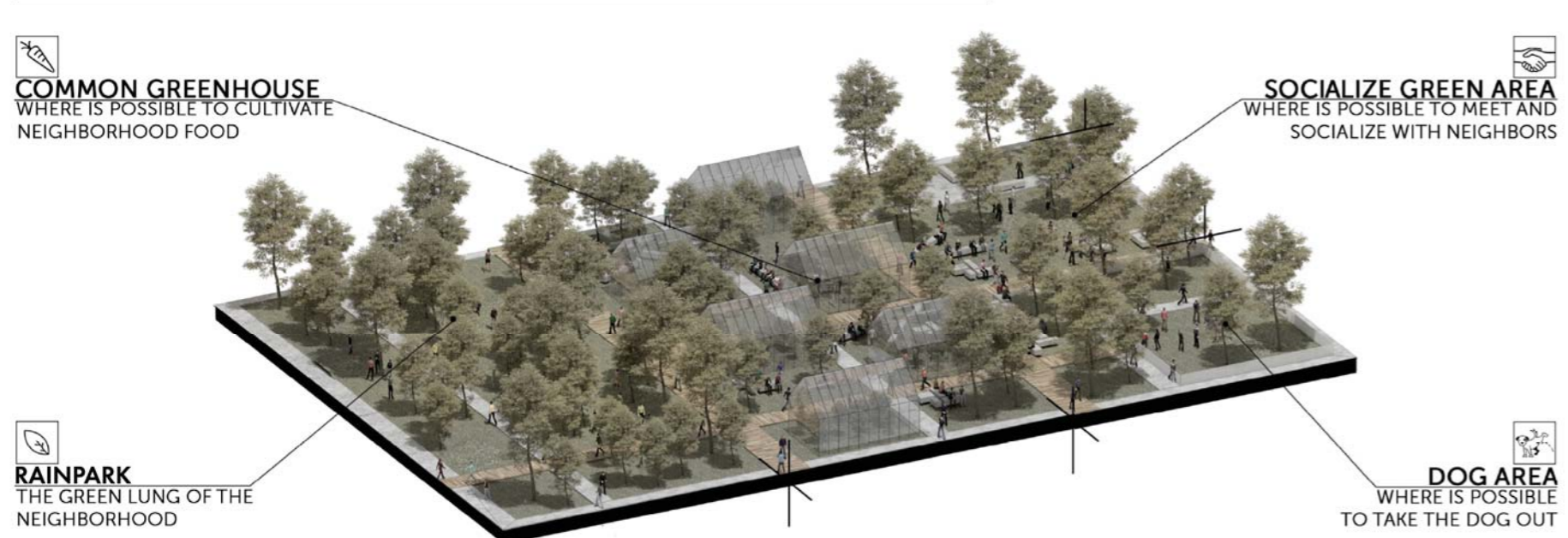
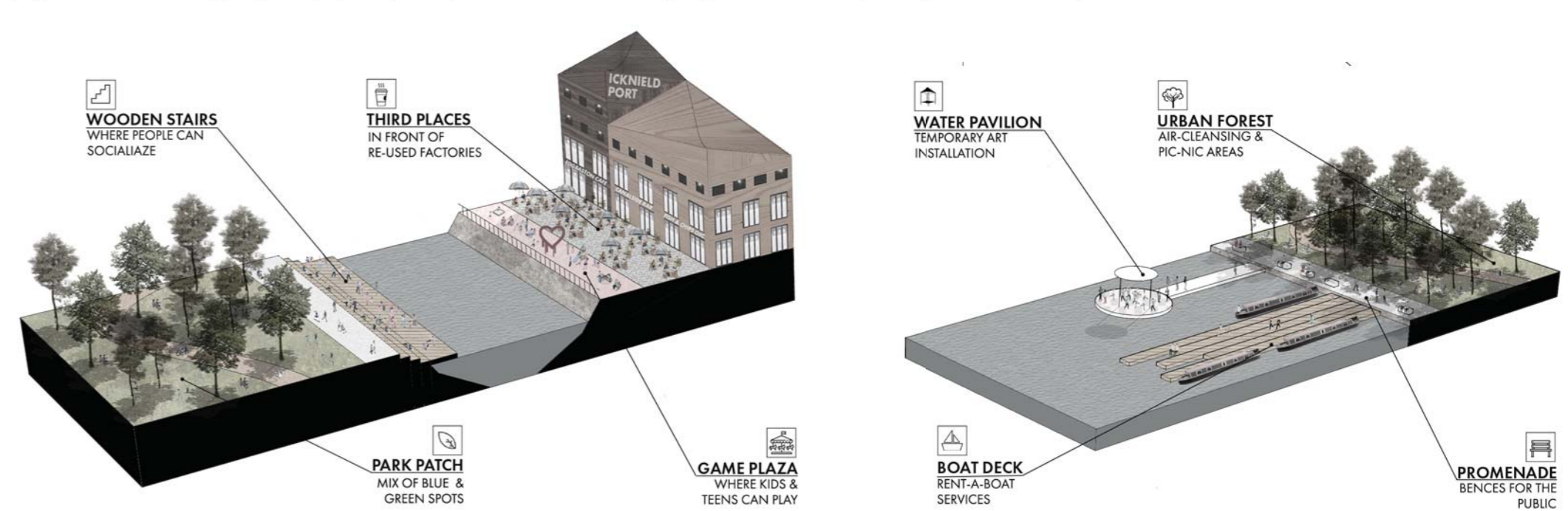


Figure 25: Mixed typologies of proposed public spaces with soft surface in Icknield, axonometric view



PUBLIC SPACES PLURALISM

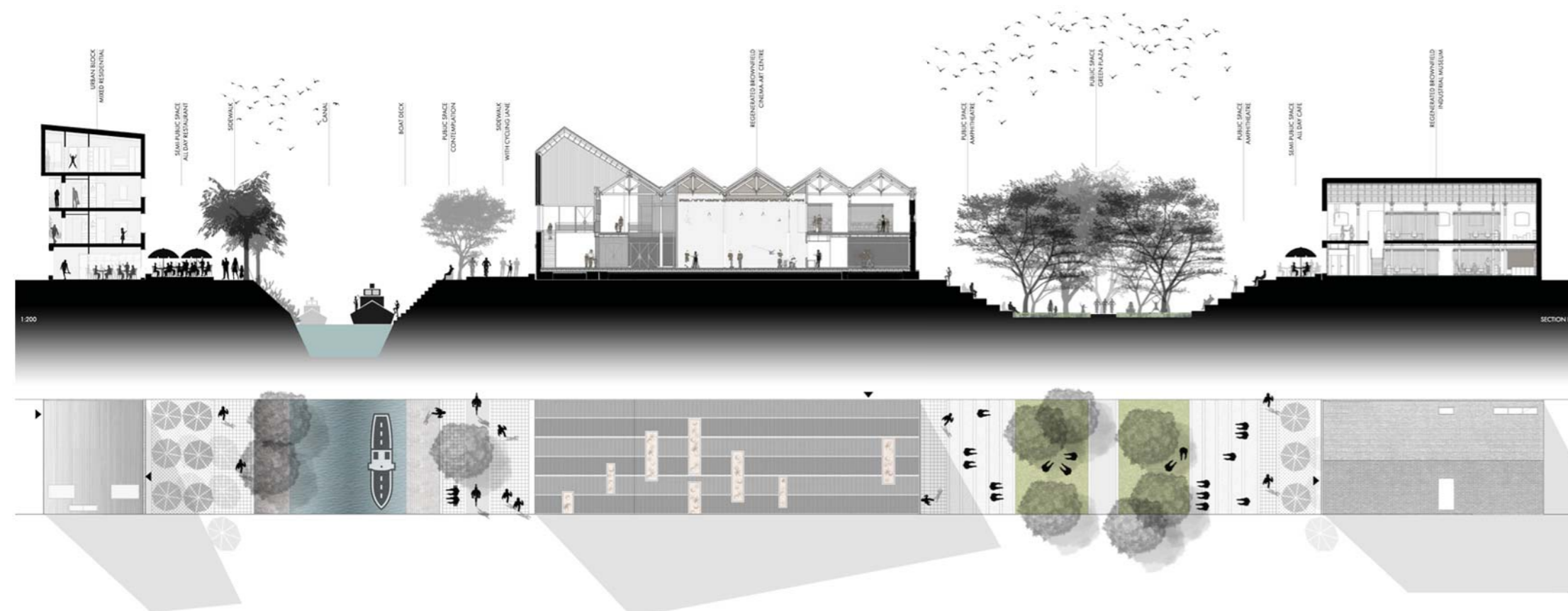
Figures 26 a&b: Mixed typologies of proposed public spaces around canals and by Edgbaston reservoir respectively, axonometric view



Figures 27: Landscape section, 1:500



Public space qualities: created with people, for people



Enjoy your picnics at the park, Andy!



Plenty of playscape to have fun, Sharwin!



Ickniel's canalside is the talk of the town!



Urban farms & green at your service, Lara!



Ickniel Port, a hub of culture!

Figure 28 - Playscape for kids & meeting places surrounded by city parks



Figure 29 - Re-used factories add cultural value and create extra shared spaces



Figure 30 - Vibrant public space and shared functions around canals, Ickniel's new trademark



Figure 31 - Urban gardens and healthy lifestyles



A conceptual walk through future Ickniel Port

