



BAILRIGG GARDEN VILLAGE

**AN ENGAGEMENT, MASTERPLAN
AND DESIGN CODE PROCESS THAT
RE-DEFINES LANDSCAPE LED
MASTERPLANNING**

“*Bailrigg GV presents the opportunity to re-imagine how we design new settlements to not only support nature recovery but also deliver a local food supply to the new community through the harmonious integration of new homes and productive landscape. Careful analysis of the site’s aspect, topography, soil quality, drainage characteristics and heritage sensitivity has enabled us to craft a masterplan that brings together new communities with the land that feeds them’.*”

**REBECCA TAYLOR
PARTNER AT JTP/PROJECT ARCHITECT**

“*The masterplan at Bailrigg Garden Village looks to balance for the first time the challenges between promoting the ambitions of our rural economy and housing delivery against the need to promote and protect our natural environment. These competing demands place a real complexity in creating a place which delivers on multiple uses will have to be addressed through the plan-making process to ensure the creation of places and spaces which are attractive to all. The work which has been undertaken as part of the masterplan process provides an exciting and ambitious starting point for how this can be delivered in the Garden Village.”*”

**PAUL HATCH
PRINCIPLE PLANNING OFFICER AT LANCASTER CITY
COUNCIL**

WHY THIS SCHEME DESERVES TO WIN AN AWARD

To win an award a project must do more than just be good or even excellent within the norms of our oeuvre: it must challenge and seek to alter our perspective and better the agenda for the future of the profession.

Bailrigg Garden Village (BGV) has used a new methodology of analysis and engagement, and a place shaped from a new starting point (the land, its soil, and its potential).

The lost relationship between people and land, especially food production Environmental Generational Amnesia (EGA), is the key challenge in the creation of a healthy economically viable and responsible new place. Through the masterplan and design code processes, the project has triggered changes to how we work with soil, local land designation and planning S106 requirements. The approach here will create a balanced and enduring local economy based on the reconnection of the future community with the land; connections forged through local economy, food and work.

The drive for low density housing in our open countryside was a challenge for the project, when research shows that development of town centres is the sustainable approach to deliver healthier, low car dependent, and low carbon lives. We see democracy enacted through NIMBYism with more voters keeping development away from our towns and leaving despairing planners no option but to approve housing in the agricultural landscape. The latter is prey because it is itself a sector in crisis.

The Garden Village concept is that of landscape professions (originating in Ebenezer Howard's Garden cities work). But, the 'Garden Village' idea has evolved into an anemic set of design standards facilitating development of large tracts of suburbia on productive land to meet our housing demand.

Farrer Huxley have gone back to first principles, choosing not to look at how best to put housing on a site, but to ask how best can we evolve a landscape in crisis to meet its own challenges and the demands of future living. Our work starts with the site, its present use and understanding its potential for future uses. Only then do we understand the appropriate land for food production, forestry, infra structure and settlement.

Bailrigg Garden Village has the benefit of a world leading University in many subjects across environment, soil, and healthy living on its doorstep. Farrer Huxley engaged Lancaster University understanding that knowledge, research, measurement and recording of multiple outcomes over time was key to ensuring the project achieves the masterplan aspirations over time and that it has far reaching benefits for the UK and the world.

HOW THIS WORKS

Environmental Generational Amnesia (EGA) is a theory based upon the research that each generation has a more impoverished understanding and connectedness toward ecological health. This has never been clearer than at Bailrigg, where lack of knowledge of the productive landscape is fundamental in the disconnect and destruction of the land.

By cataloguing what we had and knew, we can set a new forgotten baseline for ecological health and sickness, allowing us to form better targets for improving the landscape and our lives.

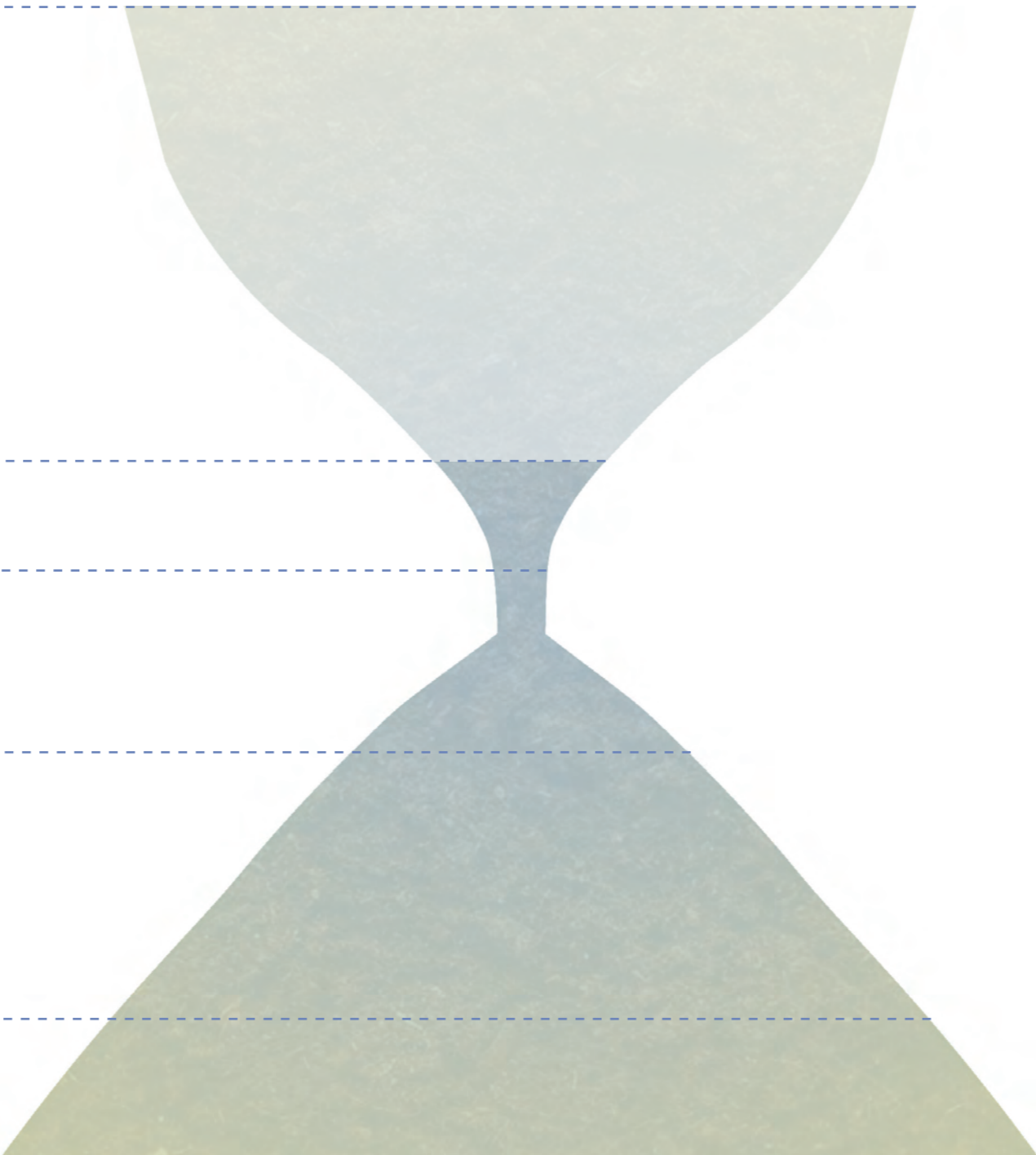
This project has realised this idea needs to inform a new revolutionary masterplanning process that better informs the necessary changes required in rural land management.

The format of this document therefore centres around five chapters:

- **What we've got**
- **What we've lost**
- **What we have to gain**
- **How we put it right**
- **What we will pass on to the next generation**

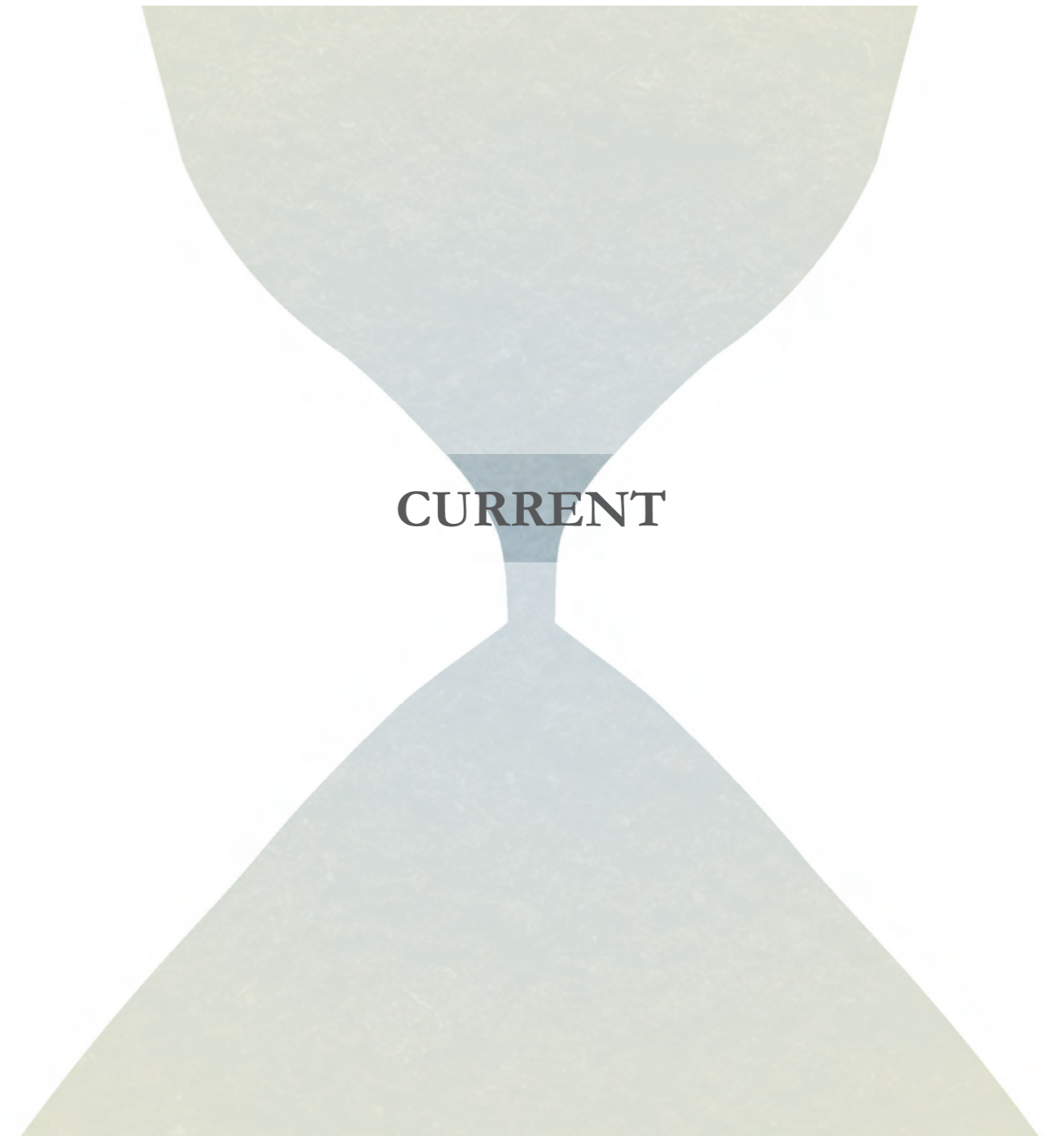
We have chosen to showcase the project within this framework, rather than the four categories outlined by the LI, as we feel these categories are fully interlined and thus inseparable from one another. By looking through the lens of academic theories, ground research, and lived experiences, we can better convince you that this work has profound significance to our profession and to Bailrigg.

CONTENTS



	PAGES
WHAT WE'VE LOST	1. WHAT WE'VE GOT 5 - 6
	<ul style="list-style-type: none">• Drumlins & Unsustainable farming• Collaboration with Lancaster University
	2. WHAT WE'VE LOST 7 - 8
	<ul style="list-style-type: none">• Understanding what we've lost
WHAT WE'VE GOT	3. WHAT WE HAVE TO GAIN 9 - 12
HOW WE PUT IT RIGHT	<ul style="list-style-type: none">• This place• Food and production at the heart of the community• A circular community
WHAT WE HAVE TO GAIN	4. HOW WE PUT IT RIGHT 13 - 16
	<ul style="list-style-type: none">• Reconnect with the land• We can depend on the land• Drawing a new settlement pattern
WHAT WE WILL PASS ON TO THE NEXT GENERATION	5. WHAT WE WILL PASS ON TO THE NEXT GENERATION 17 - 20
	<ul style="list-style-type: none">• Forgotten baselines to build on• Designate a local grain• Changing standards

WHAT WE'VE
GOT



DRUMLINS

'A low oval mound or small hill, typically one of a group, consisting of compacted boulder clay moulded by past glacial action.'

- Oxford Dictionary



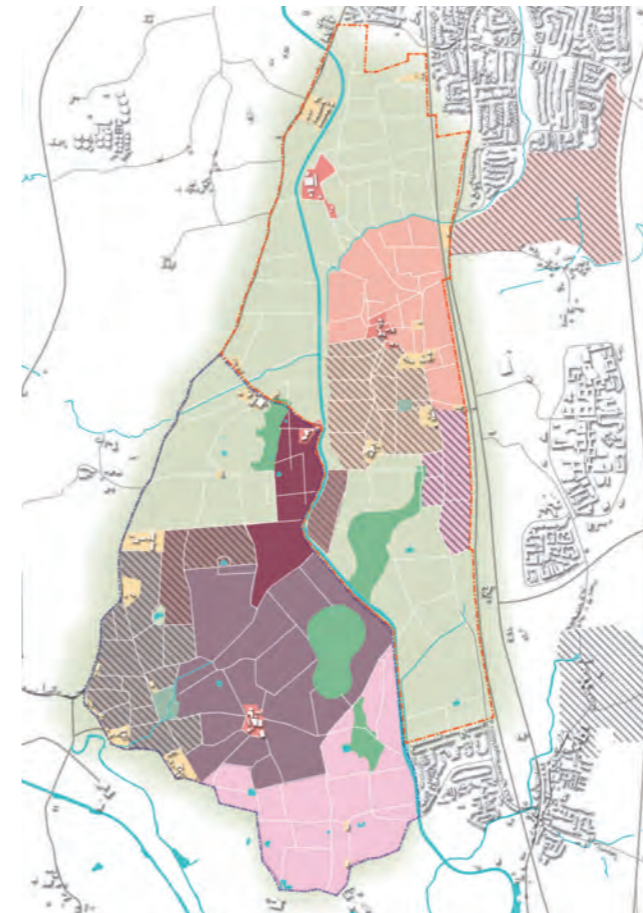
Photo taken by JTP

The rolling landscape morphology with pockets of tranquillity along the canal and the wind whistling at the tops of the drumlins with its expansive views out across Morecambe Bay all contribute to Bailrigg's distinctive character.



The topographic plan does not prepare you for the place. Hidden glimpses, steep slopes, framed views, intimacy and expanse.

UNSUSTAINABLE FARMING



The pressure on farmers to extract more from their land for less means the entire farmed land at Bailrigg supports only 11 people's lives. This reduction in people living of the land occurs across the country.

A MAP RARELY CONSIDERED IN MASTERPLANS

Farm holdings consist of large areas of owned and often rented fields by only a handful of farmers. The ever larger holdings are shaped through pressure from supermarkets driving smaller profit margins and the need for more land to earn the same return.

We were at pains to produce an accurate map of existing land use and ownership. In drawing this map we quickly realised that to understand the reality of land ownership and management, and to recognise what is happening to our landscape is material to its future use.

COLLABORATION WITH LANCASTER UNIVERSITY

RESEARCH, RECORDING AND INTERPRETATION

During the early consultation and site familiarisation we engaged with a number of faculties at Lancaster University to understand their aspiration and wishes for the new garden Village nearby.

We quickly realised that their expertise and potential role in all aspects of sustainable land management, community health and environmental change made them a powerful ally in realising Lancaster City's aspiration of an exemplar new place at Bailrigg.

COLLABORATORS:

The following are the faculties and key university personnel engaged and committed to working on achieving Bailrigg Garden Village aspirations.

SUSTAINABLE SOILS IN URBAN DEVELOPMENTS

- Professor John Quinton
- Professor Jess Davies
- Roisin O'Riordan

COMMUNITY & CULTURE

- Professor Jess Davies
- Dr Joanna Goldthorpe
- Dr Emma Halliday
- Professor Leon Cruikshank

NEG / HYDROLOGY & WATER SCIENCE

- Dr Nick Chappell
- Professor Andy Binley

MONITORING, MANAGING & CONSERVING BIODIVERSITY

- Dr Alex Bush

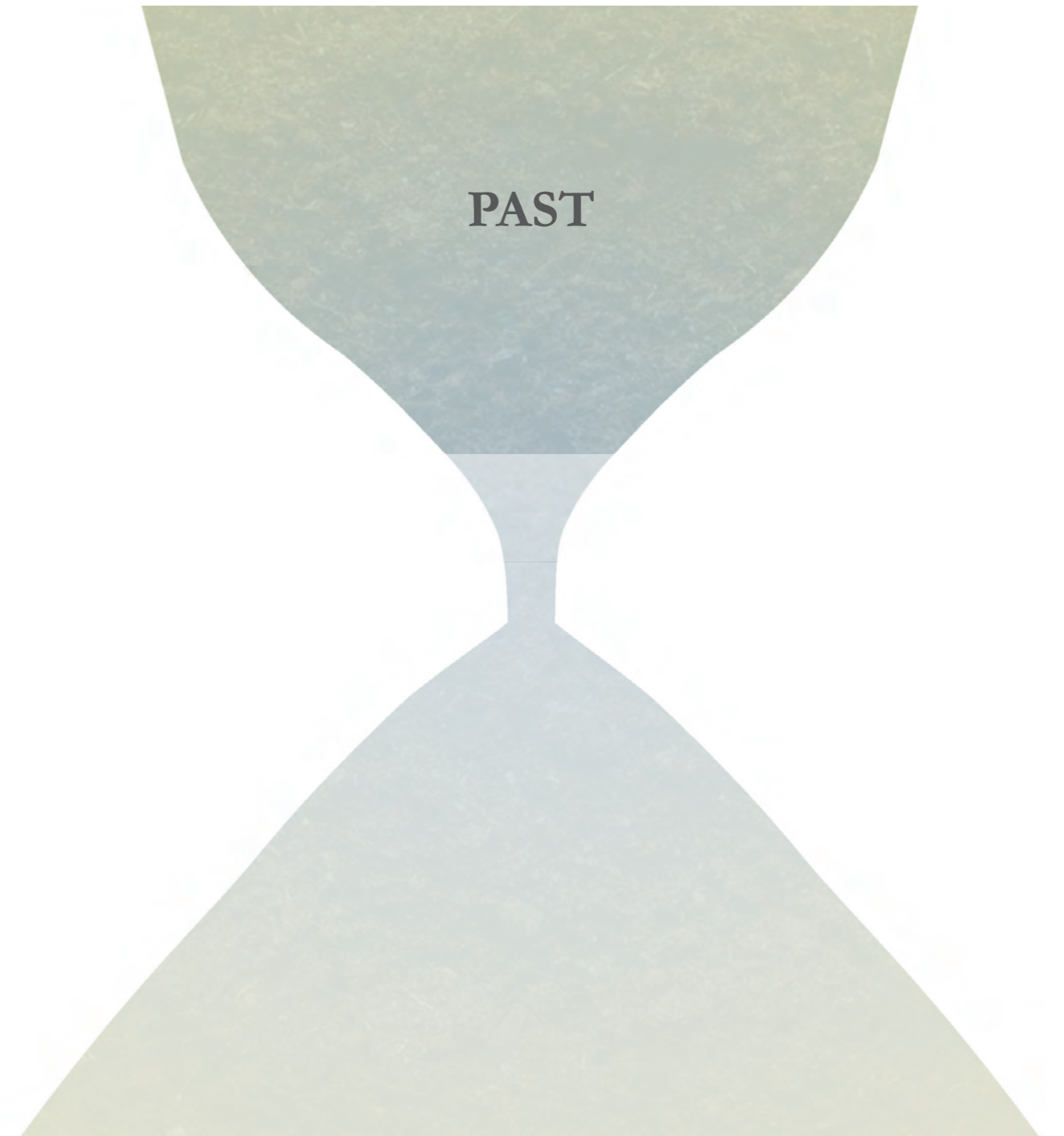
EMPLOYMENT

- Professor Jess Davies

FOOD

- Professor Jess Davies
- James Smith (not uni)

WHAT WE'VE
LOST



UNDERSTANDING WHAT WE'VE LOST

FARMING KNOWLEDGE

Today's society and certainly the communities we spoke to have little or no knowledge and therefore no care for those farming.

CONNECTION TO THE LAND

No need or requirement to engage with the systems affecting the place around you.

FOOD SECURITY

People do not connect the fields around them and the food they buy.

LAND MAINTENANCE KNOWLEDGE

The necessary processes to maintain the landscape are invisible to most people

DEPENDING ON THE LAND

Other than the farmers, no one could recognise the link between the land around them and their livelihoods

RESPECT BETWEEN FARMERS AND PUBLIC

Farmers simply cannot see that they can function in proximity to where people live (where EGA predominates).

PERCEPTION OF A HEALTHY LANDSCAPE

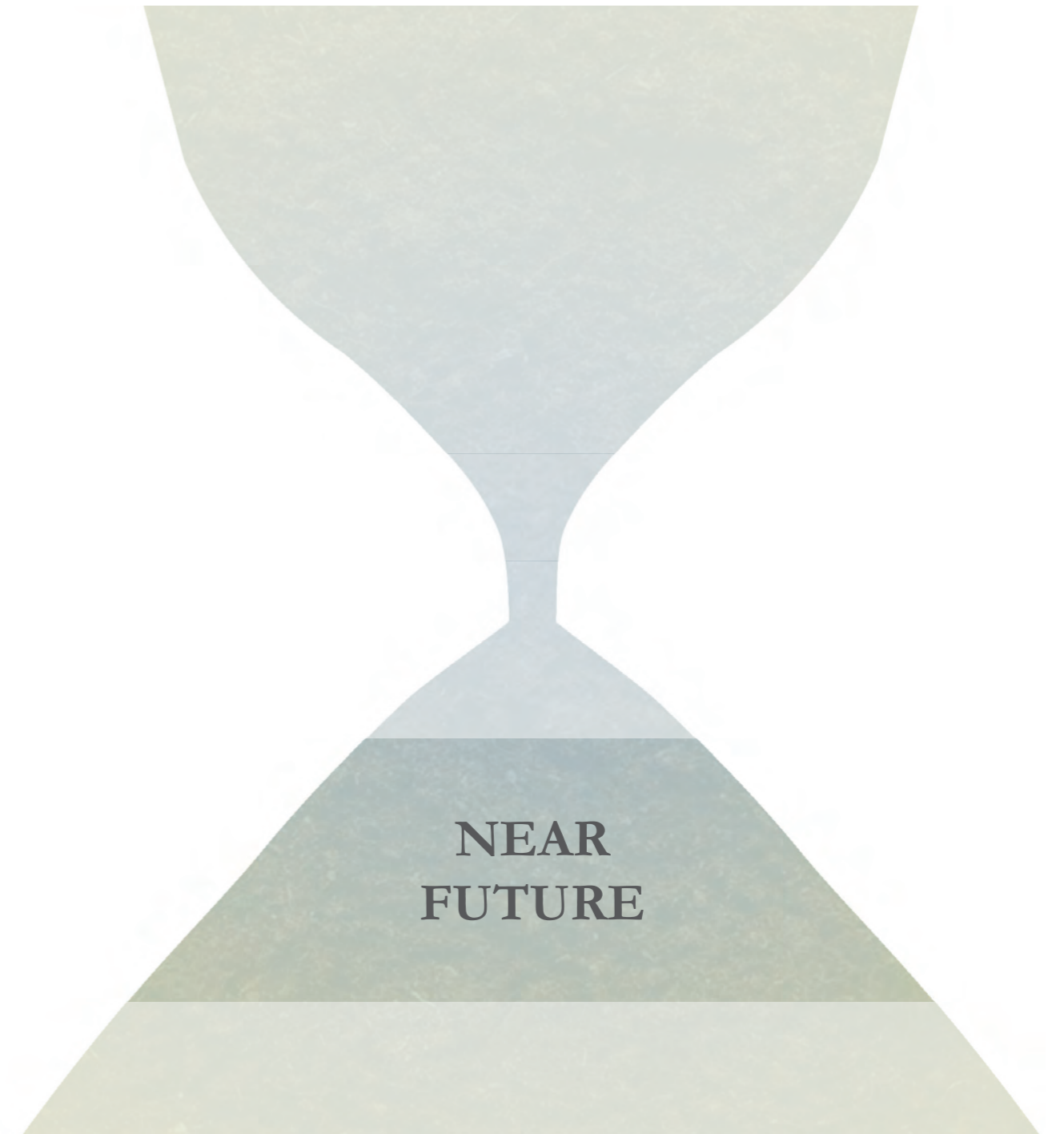
Patterns of monoculture fields are perceived as 'neat and tidy'. Natural spaces are seen as scruffy and unkempt.

ABILITY TO FARM SUSTAINABLY

The drivers of modern food supply demand intensive farming methods.

Our countryside and agricultural landscape is in crisis. All of the below are eroded through a culture of non understanding (EGA) and multi national business (supermarkets).

WHAT WE HAVE
TO GAIN



THIS PLACE



THE SPIRIT OF A HEALTHY PLACE WHERE ALL ASPECTS OF LIFE HAPPEN WHERE YOU LIVE



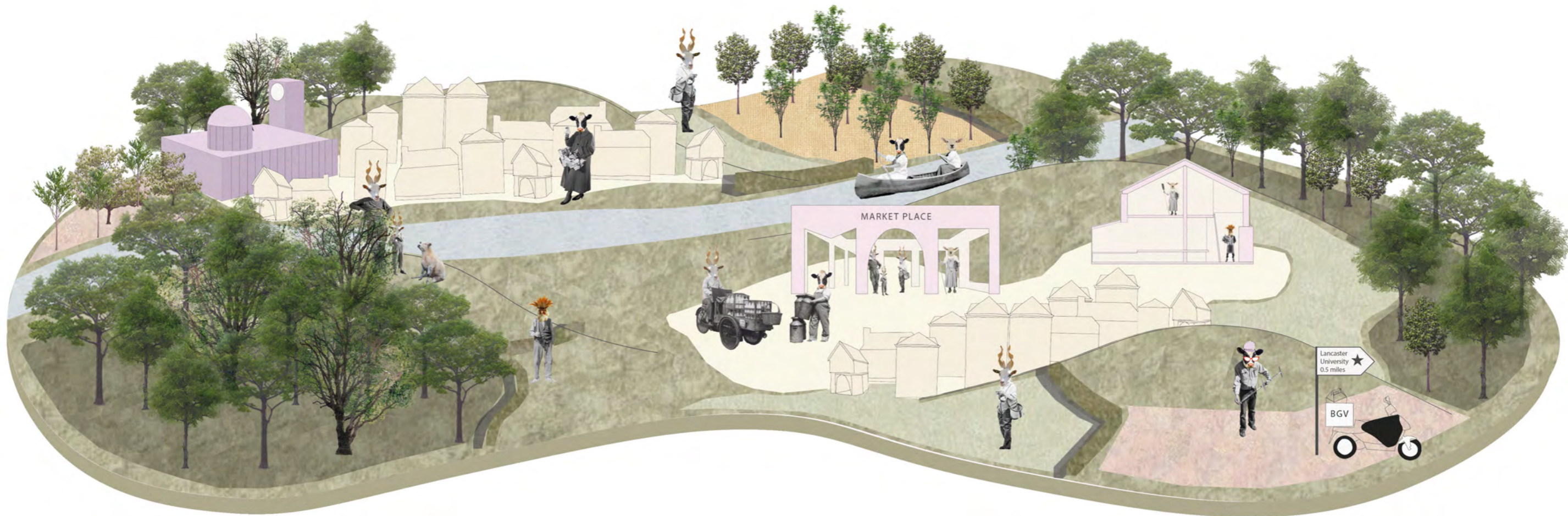
A VILLAGE SHAPED BY THE LANDSCAPE, ITS QUALITIES, ITS PROCESSES AND ITS CORNUCOPIA

FOOD & PRODUCTION AT THE HEART OF THE COMMUNITY

FOOD
SECURITY

SKILL &
KNOWLEDGE
SHARING

EQUITABLE
FOOD GROWING
OPPORTUNITIES



LOCAL PRODUCE

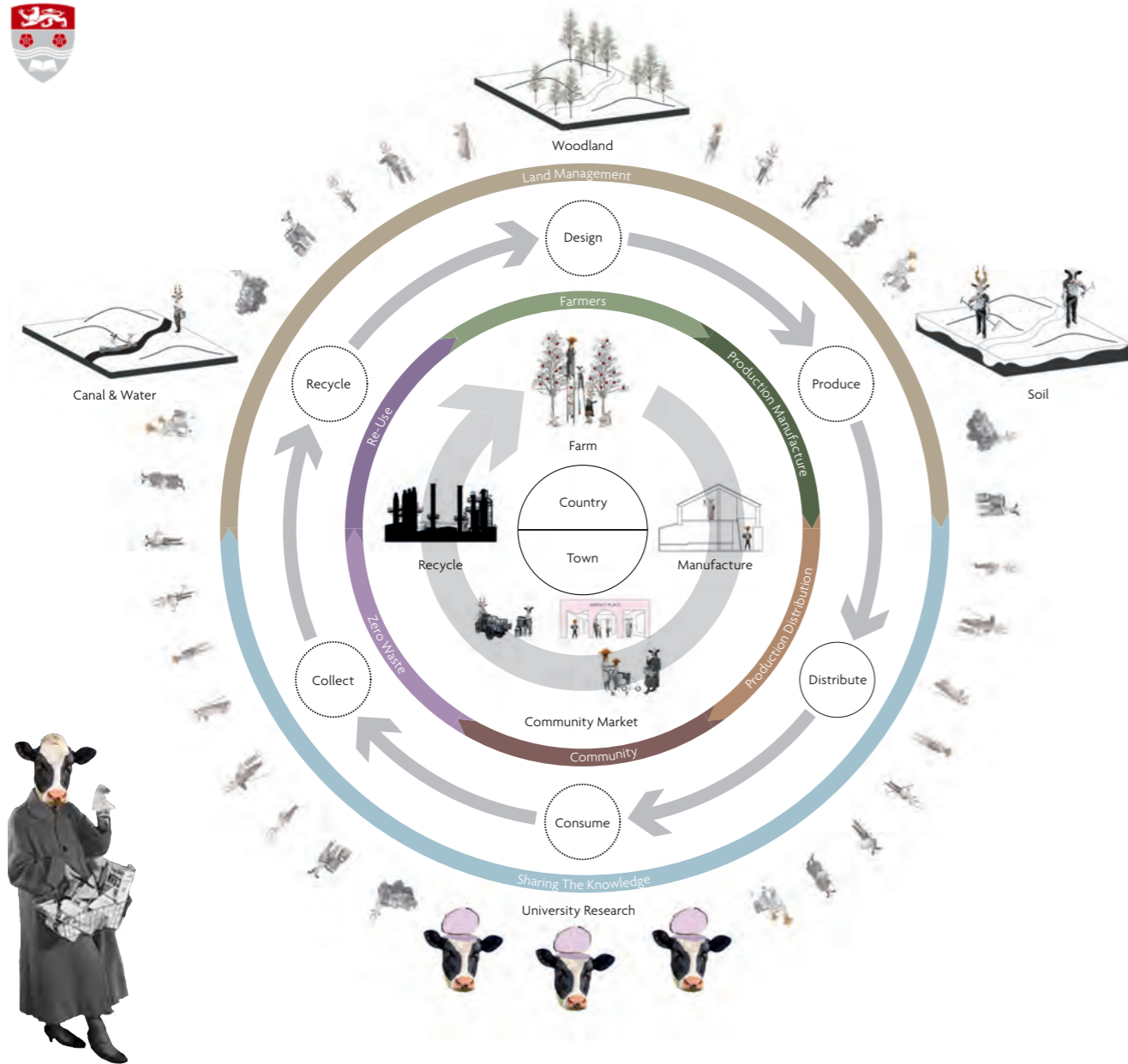
ENTERPRISE
AND WORK

HEALTHY,
AFFORDABLE
PRODUCE
FOR ALL



**BAILRIGG HAS ENOUGH FERTILE LAND
TO EMPLOY MANY PEOPLE**

A CIRCULAR COMMUNITY



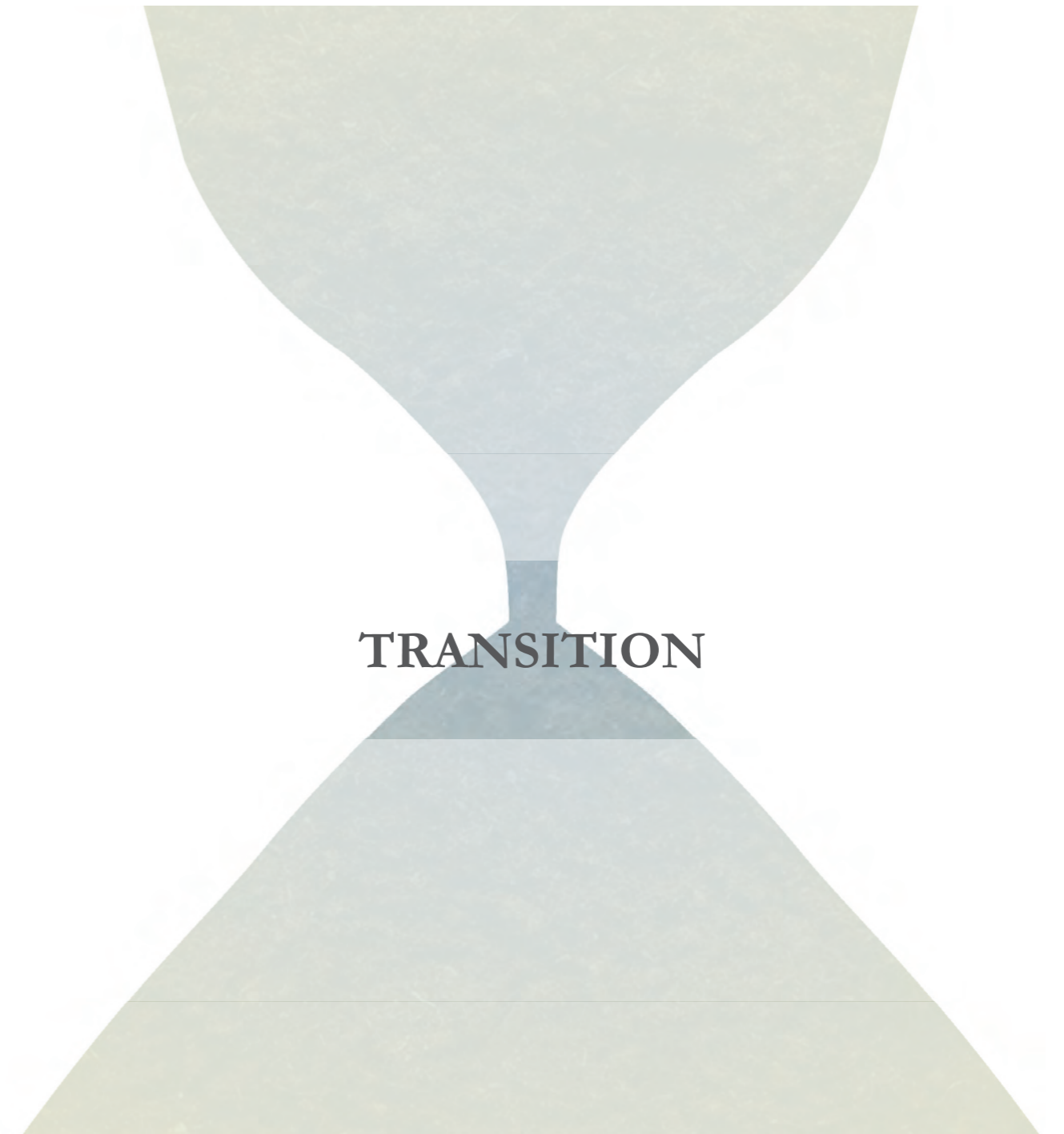
The local engagement overwhelmingly reinforced the idea that a local economy is the basis for a healthy community. A place where everyone shares an understanding of the natural and food production processes, and therefore understands that their lives are the better for it.

We reacted to this truth by combining people with domesticated animals. This metaphor represents the importance of relationship between food with people, place and communities.



A masterplan shaped by the land, its attributes and functions. Moving away from monoculture to multi-culture.

HOW WE PUT IT RIGHT



RECONNECT WITH THE LAND

DISTANT PAST

CHILDHOOD

RECENT PAST

PRESENT

NEAR FUTURE

DEATH

DISTANT FUTURE

A COUNTRYSIDE MISUNDERSTOOD AND IN CRISIS!



We have realised the reversal of the almost complete Environmental Generational Amnesia (EGA) is central to the creation of ALL Garden Villages. Central to Bailrigg as a pioneer in achieving this goal is the rigour, testing, KPI's and measurement they offer over the full life (25yrs) of the evolution of Bailrigg Garden Village.

Close relationship with land, a community where everyone makes their living on the land.

Transition, industrialisation, movement from country to city. Some knowledge remains within families and communities.

Supermarkets create a complete disconnect with land and the process of food production. This leads to further reduction of those living on the land and profit margins.

Farming on the brink of destruction, pressures on land, soil, labour. Children only know of 'bad times' in farming and unsustainable practices. General public have forgotten most farming knowledge and how to respect the land. **The countryside has never supported so few people.**

Lancaster University set a new baseline and targets based on soil samples and historical ecological health, informing the reappraisal of planning policy, soil and land designation. Community knowledge sharing helps to form a picture of what has been lost and what there is to gain.

Death is rebirth as the passions of the old are transmitted and taken forward through the livelihood of future generations. Each generation of stewards has a deeper understanding of landscape functions and systems, and a pride in having a livelihood from the land where they live.

LU provides measurement of performance against targets so that Bailrigg becomes an influential testing bed for wider land management and stewardship projects and informs policy. Bailrigg becomes a thriving, diverse local economy built on community, jobs, play and engagement.

WHAT WE'VE LOST

WHAT WE HAVE TO GAIN

WE CAN DEPEND ON THE LAND

ENVIRONMENTAL
GENERATIONAL
AMNESIA



LANCASTER
UNIVERSITY

MEASURE

MEASURE

IMPROVE

EVIDENCE

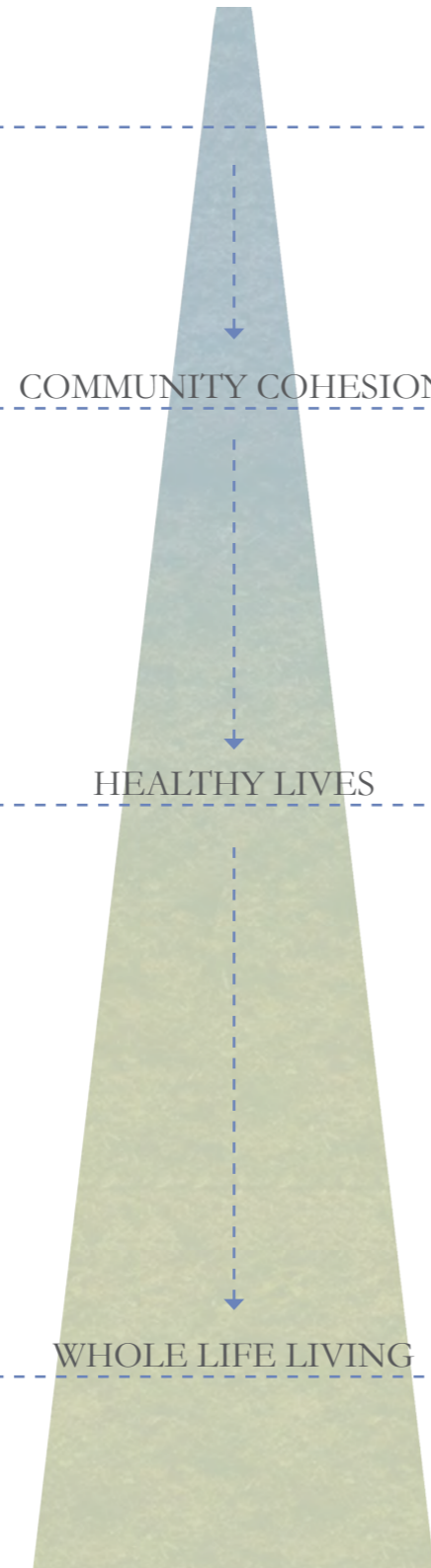
KPI'S

HAPPINESS

MENTAL

PHYSICAL

OTHER

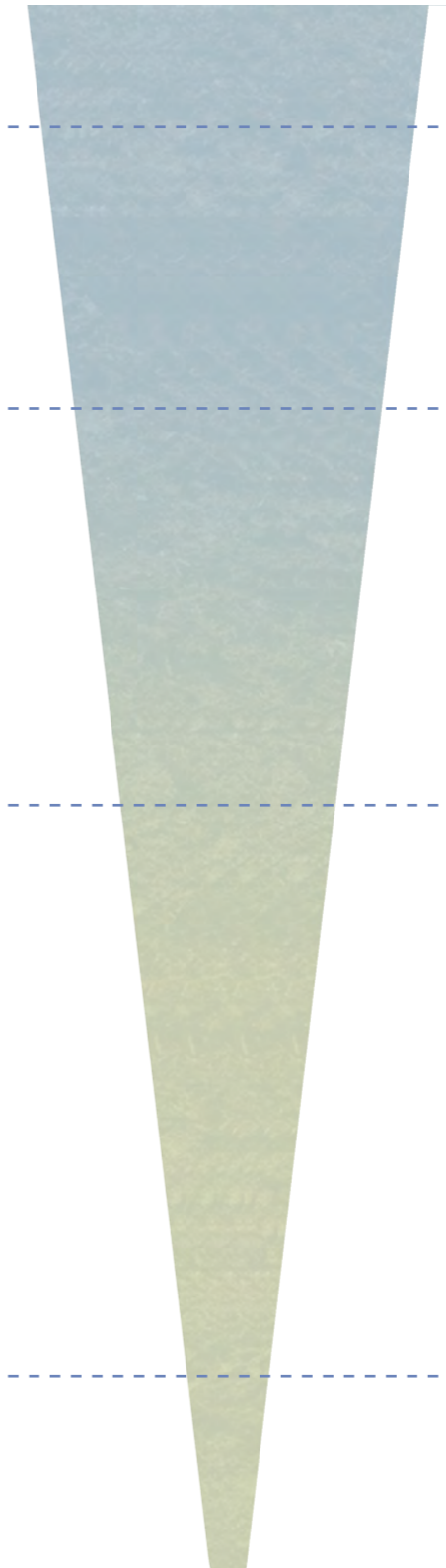


COMMUNITY COHESION

HEALTHY LIVES

WHOLE LIFE LIVING

COMMUNITY
BUILDING



The planning designation encouraging and nurturing local land based enterprise.

More people realising a livelihood on the land. Local people buying and engaging in the land.

Emerging local food economy.

Place dependence = more responsible behaviour.

A strong community.

DRAWING A NEW SETTLEMENT PATTERN

We realised that the most beloved local settlements were formed by adapting to the drumlin landscape around them, working with it rather than against. In doing so these places are full of character, and function as a part of wider systems.

The houses and buildings are built on the ground least fit for crops and grazing. The buildings forming ribbons of development with farm buildings, barns and workshops never far from the land they serve.

Water run off is in rills and streams that cut their way from hillside to valley floor running quickly through the hill side settlements via yards and runnels.

Consideration of multifunctional land use rather than purely the need for housing demands a whole new layer of thinking and reveals a richer more sustainable balanced local economy.

It is interesting that when you apply these simple ideas the settlement patterns and forms become profoundly different to those we see in contemporary masterplans driven by phasing of construction, roads and the car:



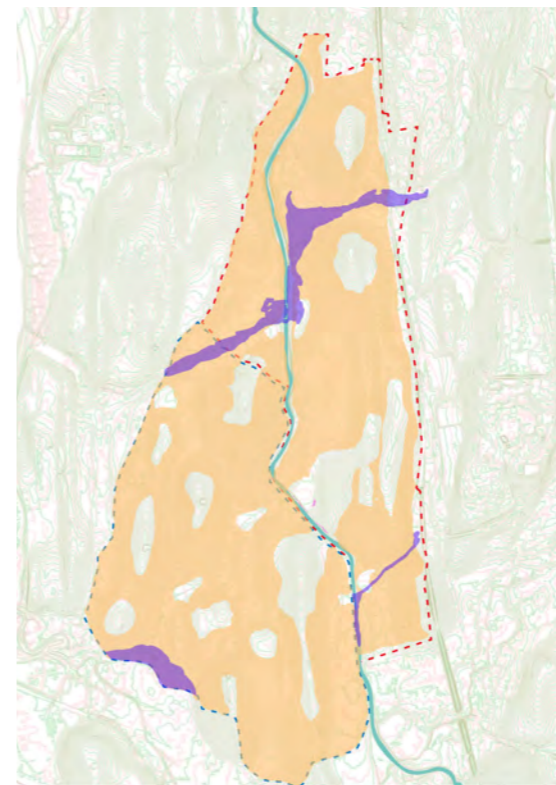
Buildings hug the topography and views out to the hills retained through gaps.



Yards channel water run-off.



Green creeps in to the town from the edges, with little to no green in the town itself.



Land available for growing and housing - avoiding drumlin tops, flood zones and ancient woodland



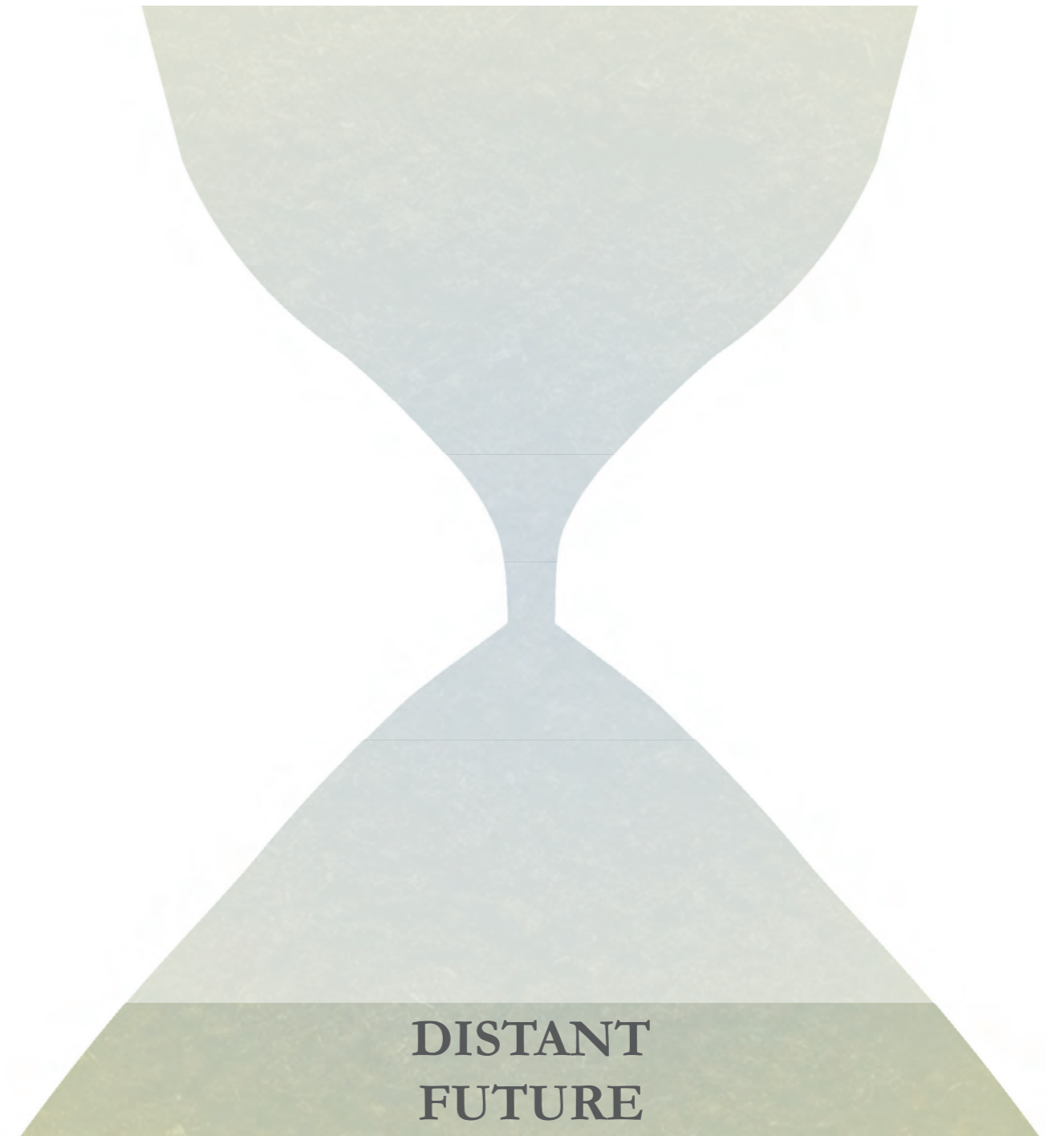
Land available for growing and housing - a careful balance between the sunniest and flattest areas of land

THE OLD PATTERNS ENSURED THE LOCAL ECONOMY WAS ACCOMMODATED & FUNCTIONING



The best soil should be reserved for productive landscape with housing relegated to non fertile areas.

WHAT WE WILL
PASS ON TO THE
NEXT
GENERATION

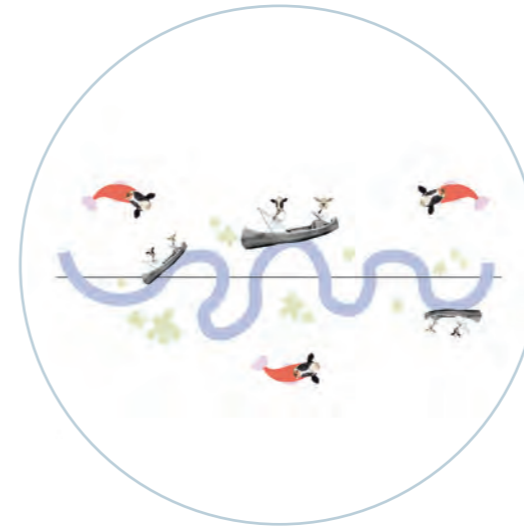


FORGOTTEN BASELINES TO BUILD ON

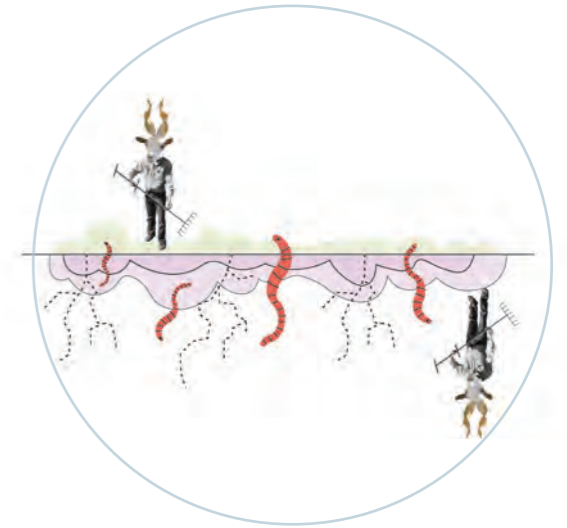
Lancaster University will be measuring, monitoring, and understanding what works and what doesn't. This is essential in informing later phases of the development and future Garden Villages.



FOOD



NET ENVIRONMENTAL GAIN / HYDROLOGY & WATER SCIENCE



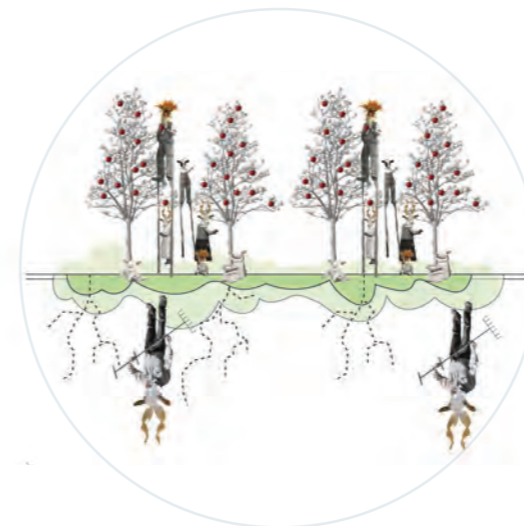
SUSTAINABLE SOILS IN URBAN DEVELOPMENTS



EMPLOYMENT



COMMUNITY & CULTURE



MANAGEMENT & MAINTENANCE

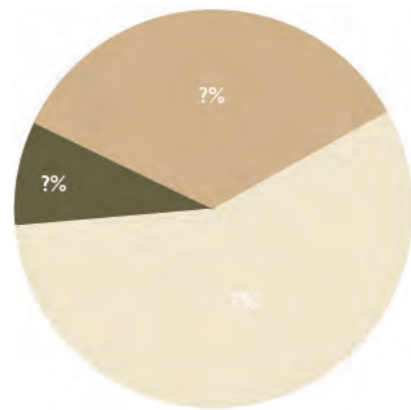


MONITORING, MANAGING & CONSERVING BIODIVERSITY

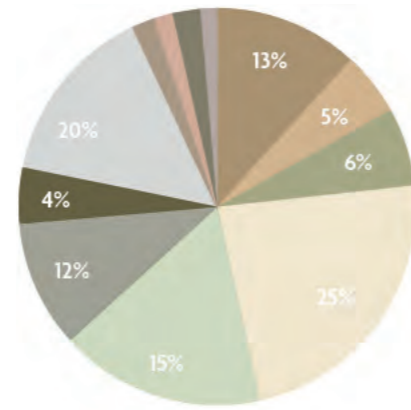


DESIGNATE A LOCAL GRAIN

SITE SPECIFIC LAND USES INCLUDED WITHIN DEVELOPER DELIVERABLES



Present day planning designation



Identified bailrigg landscape layers

- Each developer will be required to purchase and appropriately instigate and/or manage viable plots of land outside the typical urban realm.
- This can include well proportioned areas of land for grazing, community growing, and rewilding land, amongst other land categories.
- The plots required to be bought will depend on the specific part of the masterplan, for example developers will be required to develop strategies for rewilding around ancient woodland if their plot falls in the vicinity of this land type.
- The way in which the different land uses meet one another will be considered to integrate irregularity so that the character of the masterplan retains its integrity.



1.



2.

- Productive landscape ●
- Marshy wetlands ●
- Proposed settlements ●
- Canal and riparian landscape ●
- Market square ●
- Agroforestry ●
- Community growing ●
- Open space ●
- Existing ancient woodland ●
- Orchard ●
- Proposed woodland ●
- Open grazing ●



3.

CHANGING STANDARDS

BAILRIGG HAS SHOWN THE NEED TO REVISE OUR STANDARD METHODOLOGIES FOR MASTERPLANNING PLACING MORE EMPHASIS ON EXISTING LAND USE AND THE ACCOMMODATION OF FOOD PRODUCTION IN FUTURE RURAL AREA DEVELOPMENT:

Our work started with visiting and listening to every farmer who worked the land that dominates the site. Quickly we became aware that our purpose is not to take something that is clearly broken and simply exploit it as an opportunity for housing; we must look to create new places that provide the necessary planning vehicles for successful food production.

Our research then showed the value of closer understanding of land and the central problem of environmental generational amnesia (EGA) needing to be addressed. It was interesting to note that the farmers considered carry on was made impossible primarily by EGA rather than our presumption it would be simply loss of land.

Working with Lancaster University and Lancaster City Council who both aspired to create an exemplar future place we have been able to develop a land sensitive masterplan that can deliver the “Garden Village” of the future.

Our work has led to a number of streams of research at the University, the setting up of the “Soils in Planning and Construction task Force” and most importantly providing the focus for the Lancaster planning team to explore and create new policy for embedding our masterplan principles in the future landscape framework for development at Bailrigg.



Pages from Spatial Framework document by Bailrigg design team, illustrations by JTP



Images from Soils in Planning and Construction Task Force website
<https://wp.lancs.ac.uk/sustainable-soils/2021/10/06/soils-in-planning-and-construction-task-force/>