

01.

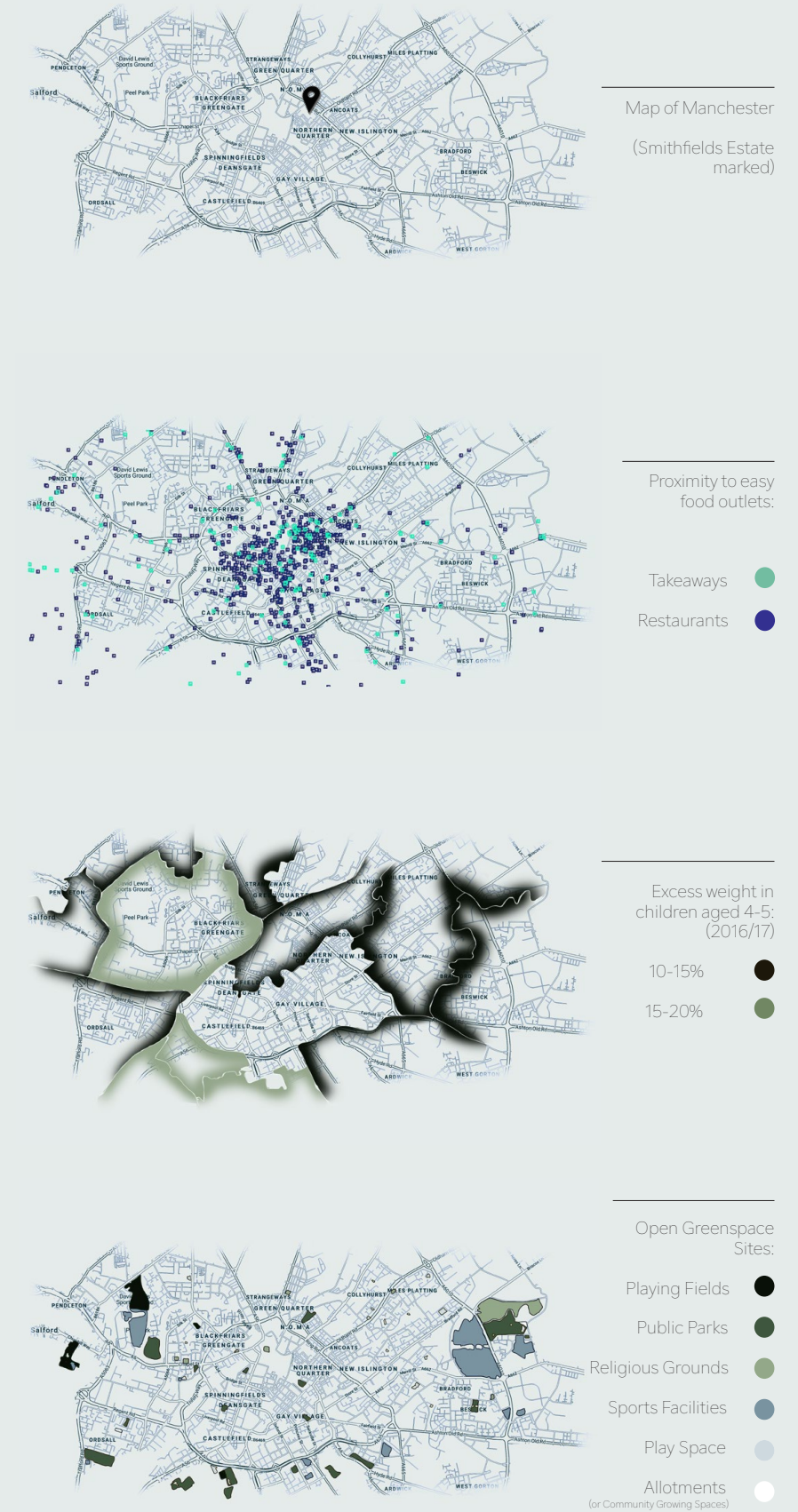
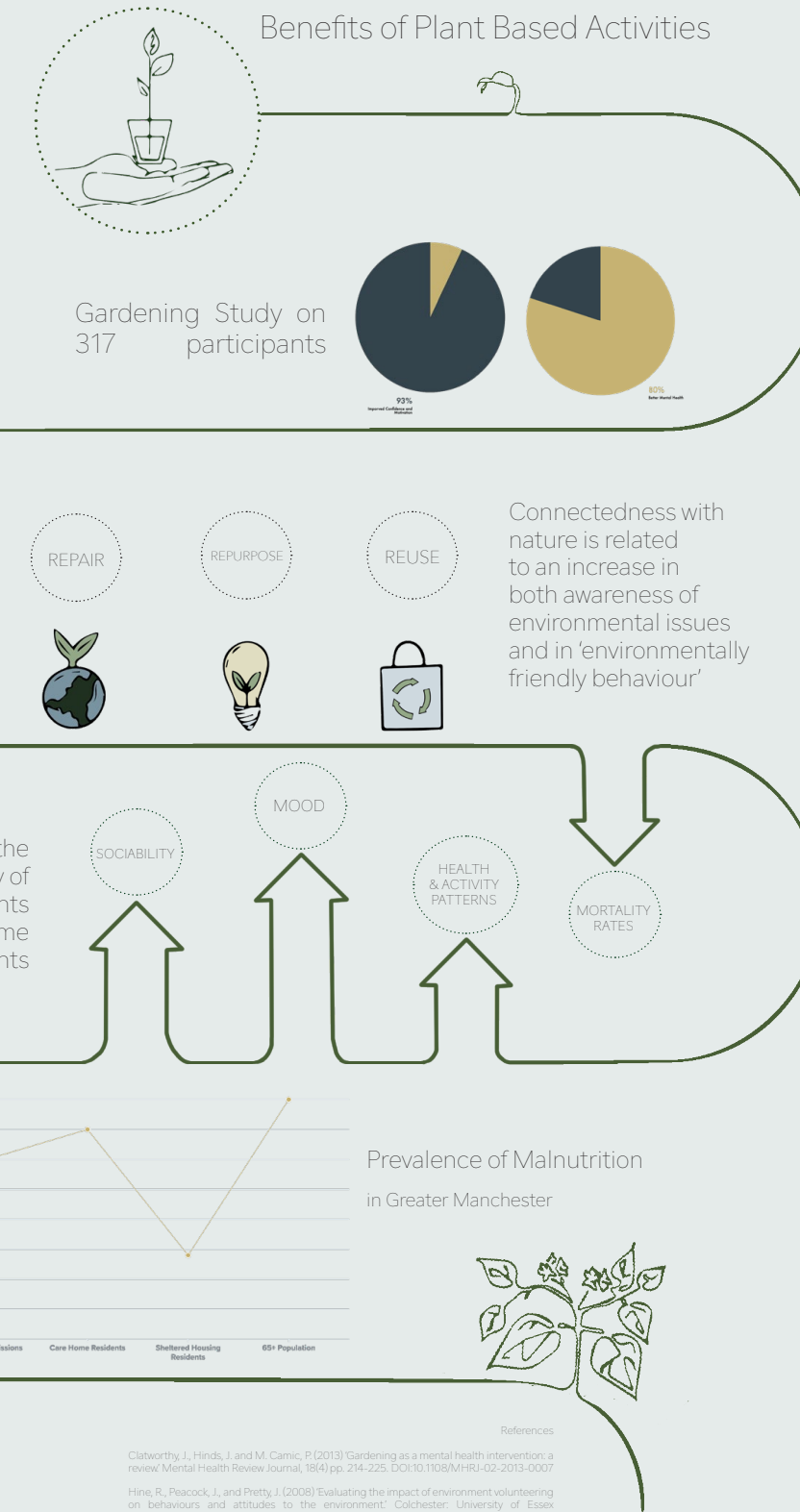
ORGANITECTURE



Reintegrating organic material into the fabric of design with both the individual and community in mind; promoting healthy lifestyles, sustainability and the longevity of a home.



02.



A Problem

B Process

C Proposal

As populations soar and globalisation pulls the work force into city spaces, urban living is the future, with 60% of the global population projected to live in urban areas by 2030. With city life comes issues unseen in their rural counterparts; food demands and dietary patterns, isolation and loneliness, restrictive living spaces and a disconnect from nature and organic material.

Following this, I began thinking about how design can encourage healthier lifestyles. For the older generation, this is through socialisation and physical stimulation to combat loneliness and declining health. For families and the younger generation this is through knowledge, access to healthy choices and flexible living spaces. This design is based on the Smithfield's Estate in Manchester, where a growing community and gardening club is already established.

For the gardening club to reach its full potential, Organitecture proposes a holistic infrastructure that starts in the home and extends into the community. By implementing green opportunities in the home and a community greenhouse/green space, the activity of growing is utilised as a tool to recentre health and wellbeing, with socialisation strategies encouraging this growing community to evolve through healthier and greener lifestyle choices.

03.

COMMUNITY SPACE TECHNICAL DRAWINGS

Scale 1:100

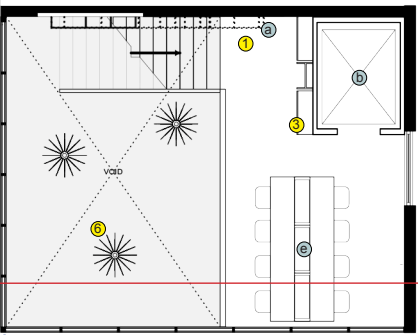
By repurposing an end terrace and the empty plot opposite, this greenhouse and green space provide residents with the means and opportunity to grow plants and vegetation, gather and socialise, cook in the communal kitchen and eat together. A donation bookshelf in the greenhouse is to be filled with cookbooks and growers' guides donated by residents, for residents. The live plant wall is

self-irrigating and generates electricity through harvesting electrodes excreted through biomass, which is used to power the LED grow lights for the hydroponic system. Organitecture is a community helping each other to learn to grow and cook healthier foods. It also encourages socialisation in shared activities, aiming to reduce isolation and loneliness whilst developing connections between neighbours.

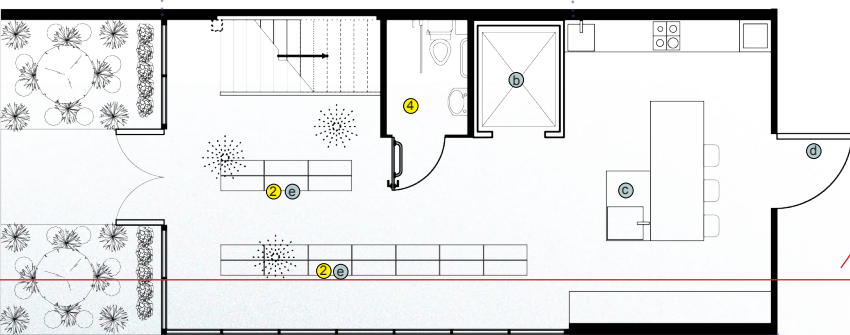
KEY

- | | | | |
|------------------------------------|---|---------------------------|---|
| Electricity Harvest System | 1 | Self-Irrigating Live Wall | a |
| LED Grow Lights | 2 | Lift | b |
| Bookshelf | 3 | Accessible Sink | c |
| Accessible Toilet | 4 | Fire Exit | d |
| Compost Bins | 5 | Planters | e |
| Compost Powered Light Installation | 6 | Pergola | f |
| | | Green Spaces | g |

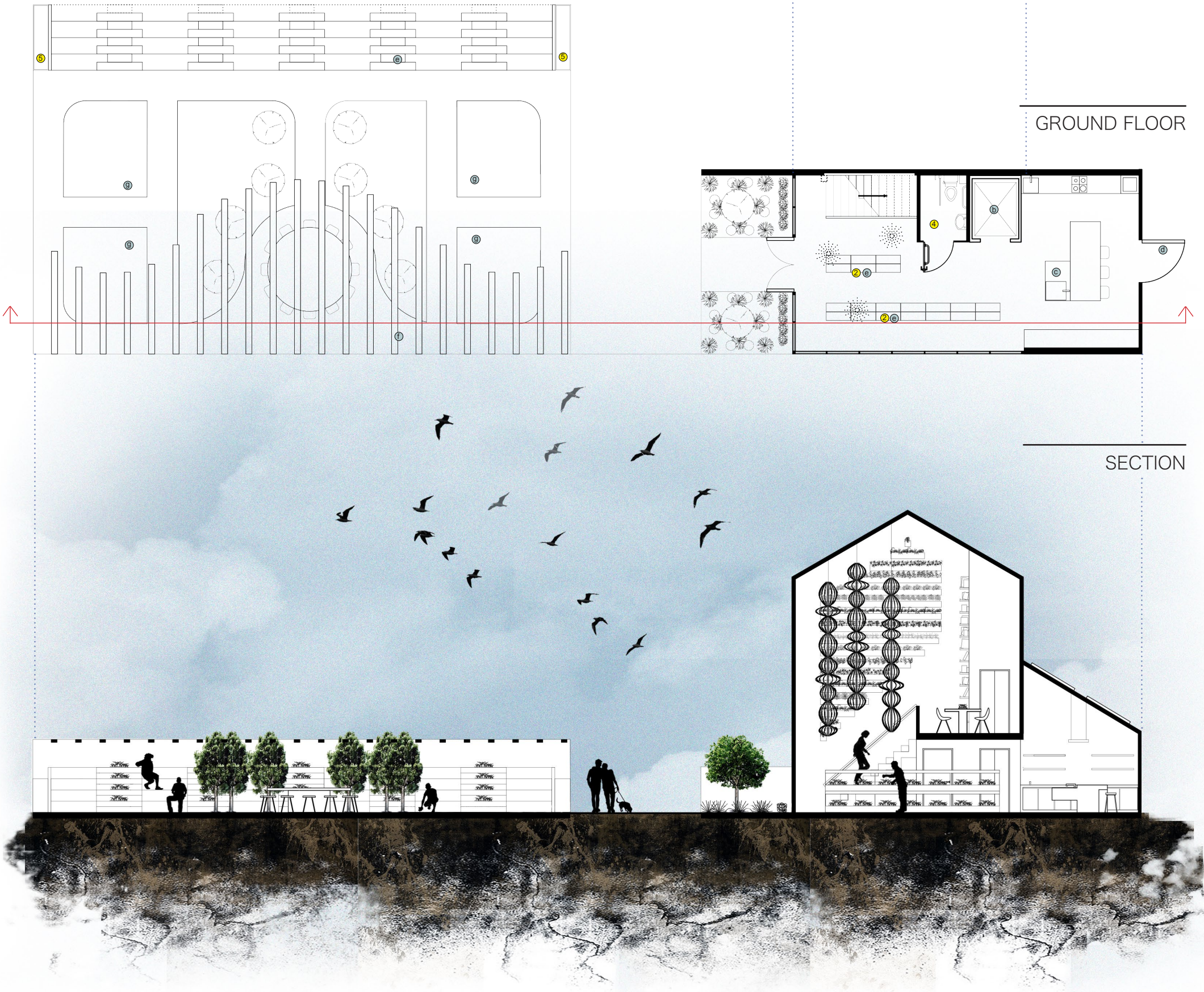
FIRST FLOOR



GROUND FLOOR



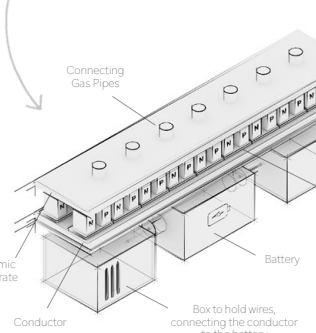
SECTION



04.

THE POWER OF ORGANIC MATERIAL

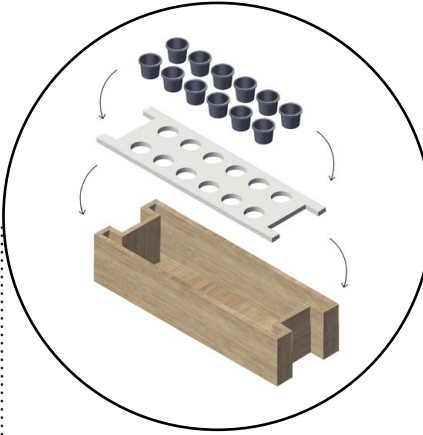
THERMOELECTRIC GENERATOR



One way Organitecture uses organic material to power the site is through compost waste. Residents dispose of their compost into these community bins. The waste is generated into electricity using a thermoelectric generator. This powers the light installation in the greenhouse continues through day and night, acting as night street lighting. This installation's form represents organic materials such as mushrooms and jellyfish; a constant reminder of the power of organic material.



GROWING PLANTERS



At the heart of the infrastructure are movable planters; accessible to all residents of the estate to use to grow plants and vegetation. Grow naturally (using the wooden planter alone) or with the optional hydroponic system. These planters can be used in each location listed below.



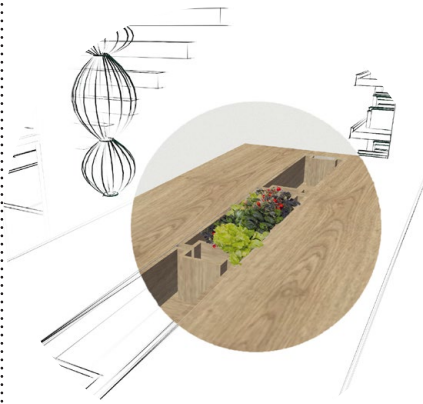
For those wanting to find their growing feet, each residence has an oriel window that protrudes out of the kitchen into the community for at home growing, encouraging confidence and love of vegetation to grow.



In the extended indoor-outdoor balconies of the home, there are slots for up to eight planters, here fitted with LED grow lights for more advanced vegetation growing.



In the community greenhouse residents can grow vegetation together, helping each other and sharing in the produce. LED grow lights work to enhance the hydroponic system.



The 'Picking Table' on the first floor of the greenhouse can be used as a workspace or for community meals, and is the perfect place to grow herbs such as mint, parsley and rosemary. As the name suggests, residents are encouraged to pick and test these herbs.



For outdoor growing, the Spanish steps in the green space holds space for up to twenty planters; a great spot to sit and socialise.

05.

RESIDENTIAL HOMES TECHNICAL DRAWINGS

Scale 1:100

The existing homes on the Smithfield's estate are to be retrofitted to enhance thermal and fabric efficiency. Installing smart ventilation systems will reduce health risks, opening up the space maximises natural light and built in-storage allows adaptability for the variety of

different needs each household has. Fabric room dividers and pocket doors will maximise space and allow for malleable environments. These measures reduce the carbon footprint of Smithfield's and encourages the independence of residents in their home surroundings.

ELEVATION A (REAR)



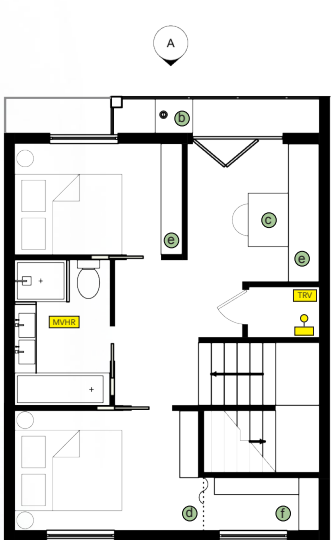
ELEVATION B (FRONT)



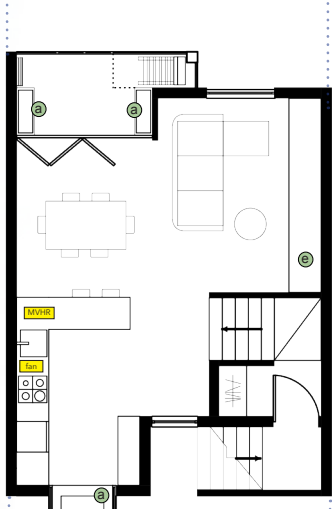
KEY

- | | | | |
|-------------------|------|---------------------|---|
| MVHR System | MVHR | Planters | a |
| TRV | TRV | Hatch | b |
| Motion Sensor | M | Murphy Bed/Desk | c |
| Ventilation Fan | fan | Fabric Room Divider | d |
| Electricity Meter | | Built in Storage | e |
| Solar Panels | S | Walk-in Wardrobe | f |

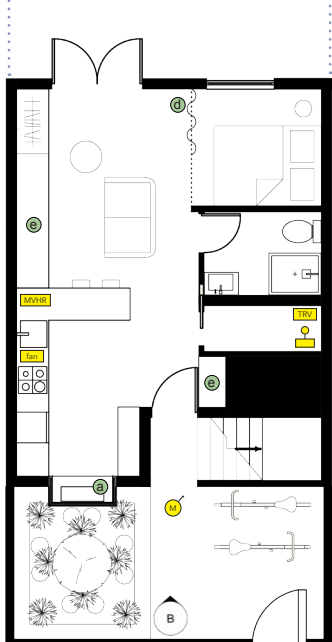
SECOND FLOOR



FIRST FLOOR



GROUND FLOOR



06.

MALLEABLE LIVING SPACES



THE HOME + POD

In keeping with the greenhouse structure, each residence without a garden has an indoor-outdoor structure that attaches to the home, blurring the boundary between the inside and out. This space joins the first and second floor via an optional hatch. The ladder used to access the hatch is also to reach the high planters on the first floor. Bi-fold doors open up to expand indoor space when needed, allowing the extension to be used in a variety of ways, appealing to all walks of life; vegetation, extra indoor space, children's play area, outdoor balcony or meditation/yoga space.

SMART STORAGE

On the second floor is an area with smart storage that transforms the space. A bed folds down to create a guest room, a desk for a home office, or fold everything up to keep the area open and spacious.



MATERIALS

- 1 Green Concrete
- 2 Reclaimed Hard Wood
- 3 Cork
- 4 Alkemi Recycled Surfaces
- 5 Steel
- 6 Glass
- 7 Cellulose Insulation
- 8 Colourful Tiles



Throughout Organitecture, sustainable materials were chosen where possible to reduce the carbon footprint and pressures on climate. Green concrete is a sustainable alternative to concrete with the same durable properties, used throughout the greenhouse; rendered on the walls and poured on the surface tops. Cork flooring is used throughout the residences because of its natural insulation properties and cushioned surface; an age-friendly consideration.