



HIRETH



*Connect back to your roots.*

Rewilding architecture  
Cornwall Wildlife Trust Hub and Forage School

The UK has lost 50% of its biodiversity; more than one in seven native species are in decline and 30% of UK birds are threatened with extinction. But it's not just wildlife suffering. We spend less than 5% of our life outdoors, and the most endangered indicator species is 'the child in nature'. It is not just our roots we are losing, it is our future. Now is the time to change the way we live and reconnect with nature.

Hireth connects us back to our roots. Fighting back against urban habitat destruction and the development of nature deficit disorder in children. Hireth is a hub for the Cornwall Wildlife Trust, featuring a 'Forage School' encouraging adults and children to venture into the enchanting world of foraging and wildlife discovery. The space offers a connection to nature to find our lost roots through the rewilding of architecture and design.

MAKE  
SPACE  
FOR  
NATURE



**Cornwall**  
Wildlife Trust

# Strategy

An adaptive reuse strategy that involves 5 key approaches; this could shape the future for architecture.

*Intrinsically linked*



**S** *Social- ecological systems*

*The Intrinsic link between human and nature.*

**O** *Organic materials*

*Natural materials that can be reused/ recycled or composted.*

**W** *Wilding techniques*

*Recovery and restoration of the environment.*

**[E]** *Ecological Design*

*Designing with the environment at the forefront.*

## & REUSE Adaptive Reuse

Reusing an existing building.

Regenerative design that ages greatly over time. See the strategy as a structure for responsible construction. Adapting a socio-ecological mindset would alter the way we perceive construction. Using organic materials in conjunction with wilding techniques and ecological design creates healthy buildings that are kind to the environment.

### PHASE TWO

#### HYDRO/GEOTHERMAL POWER

Phase two would look to implement a renewable energy system as part of the master plan that would support new businesses. The nature of Wenford Dries structure could facilitate an ecological business park, allowing opportunities for new businesses to be ecologically built.

Access to the River Camel could see the potential for a hydro-powered build. Alternatively, the use of geothermal power in Cornwall is becoming more accessible, making that an alternative option.



### Journey of reconnection

Hireth is built to encourage conversation with the natural world, and invite interactions in a childlike way, whilst responding to the needs of employees and the local community.

#### Connect

'Hireth' a yearning for a place of which you know not what, perhaps the inherent connection to our natural roots and longing for something we have lost. Hireth aims to reinstate this connection.

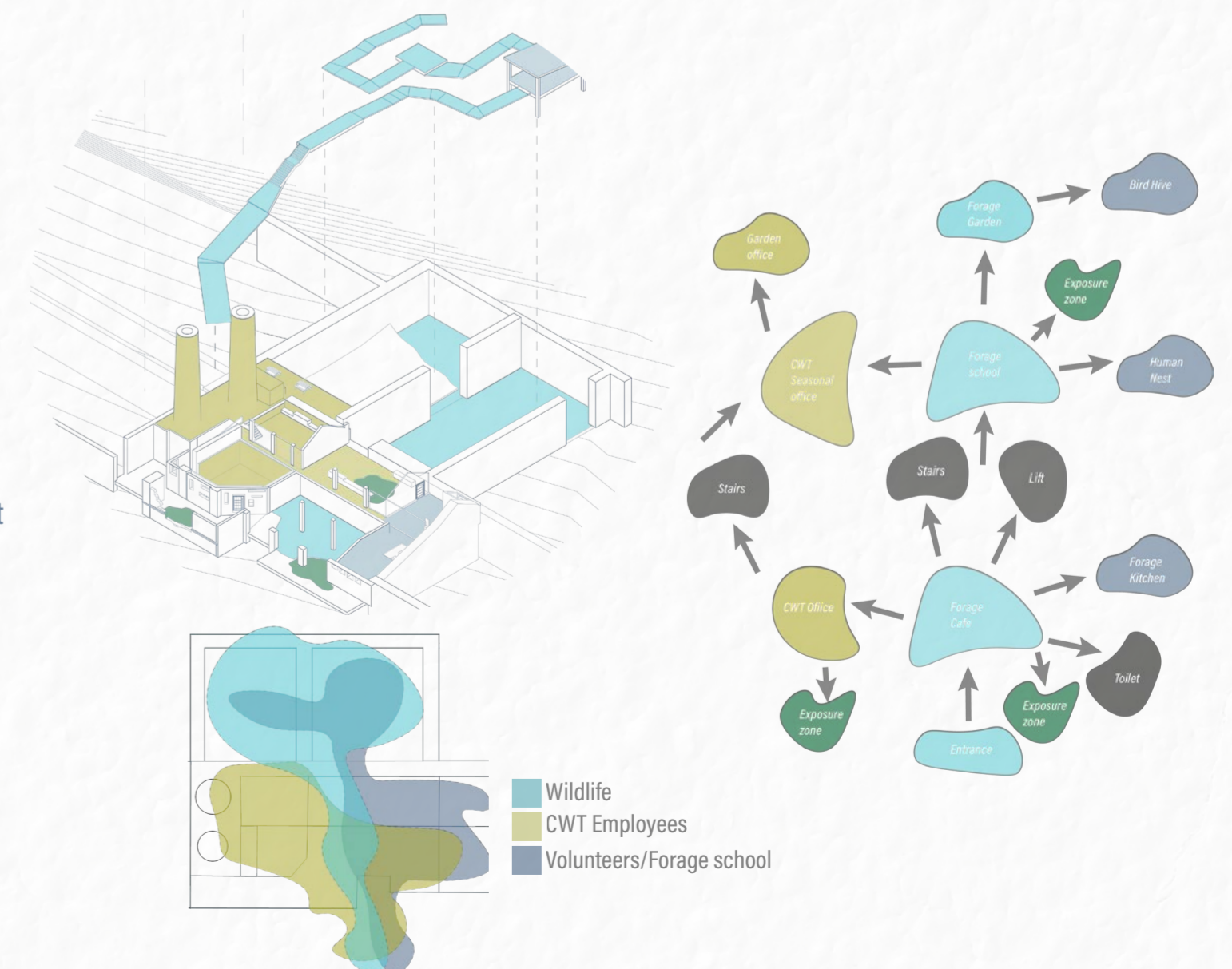
#### Exist

To simply exist in our surroundings with no pressure to be something we are not. Employees must exist and live closely with the land to understand and learn from wildlife. Taking control of nature deficit disorder by encouraging children to exist alongside nature and away from their phones.

#### Understand

Being able to perceive things as they are, and viewing ourselves as part of nature, rather than just observing it. Children will grow up with greater empathy towards nature and our planet if they are able to understand the value of wildlife.

### Schedule of accommodation



## Site

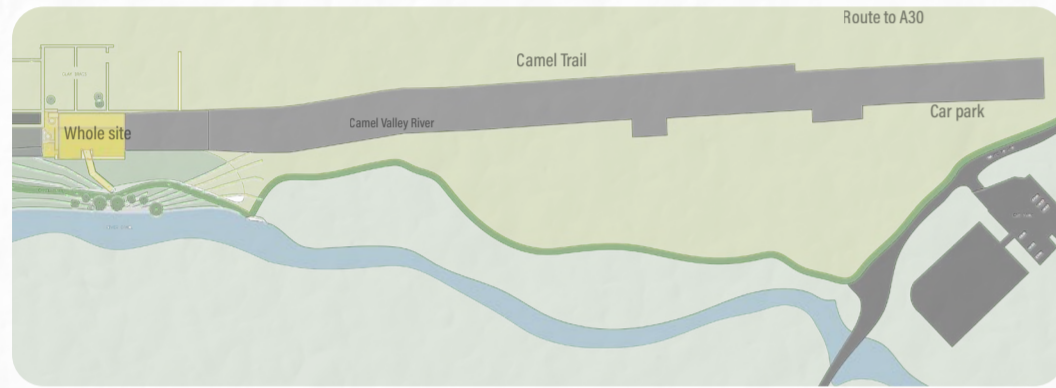
### Wenford Dries, retired Clayworks factory

Nestled in St Brewerd, Cornwall. The retired Clayworks factory is a grade II listed building.

The Camel Valley bike track built upon the old train tracks that lead to the site, which promises footfall. The site is set just behind the River Camel, offering an abundance of wildlife.

The site is located just 13 miles out from Helman Tor, rewilding project.

With easy access via bike or car share.



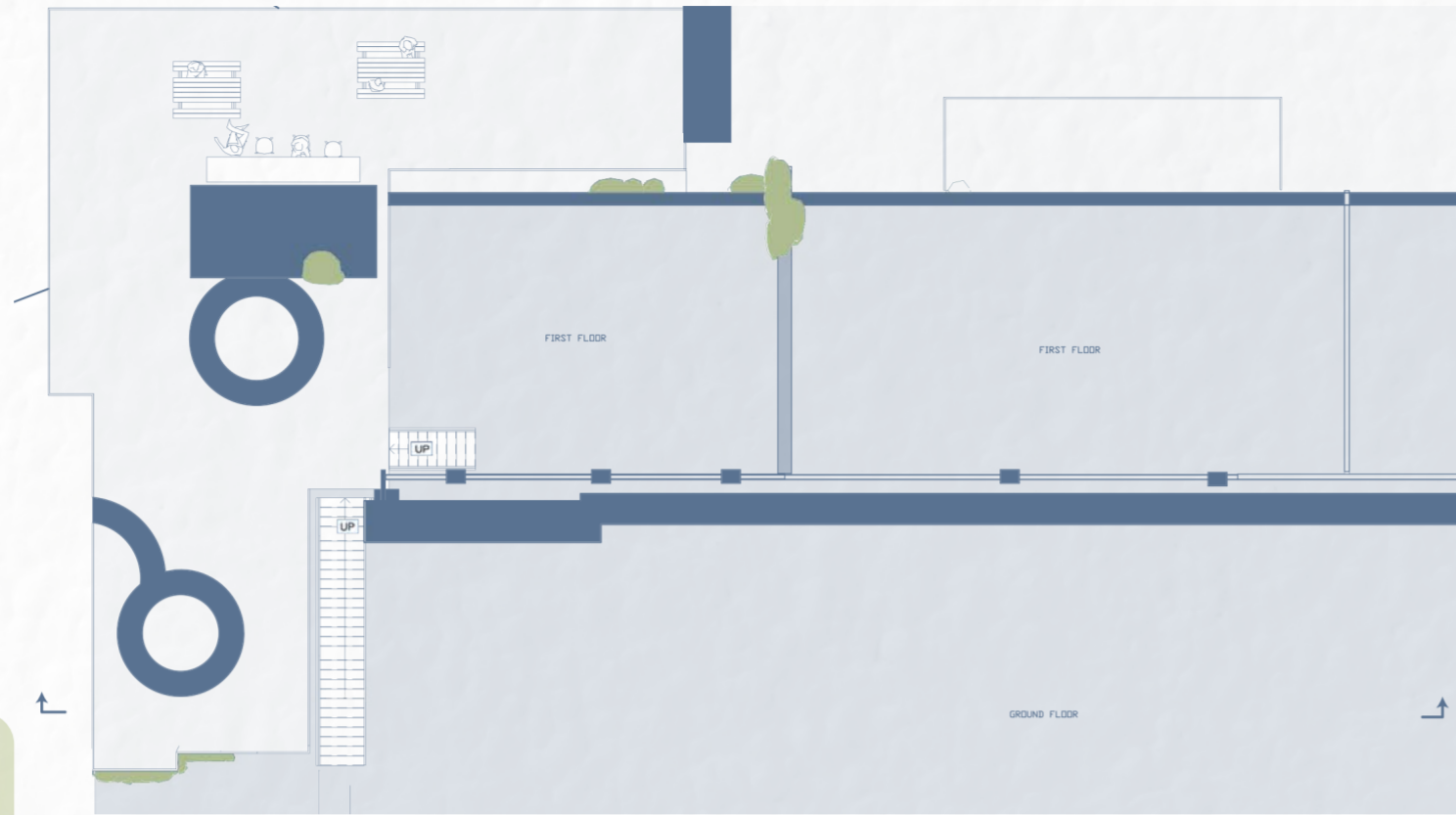
## History

It would be difficult to imagine that a busy industrial past took place in this tiny farming town of Cornwall, however Wenford Dries was an integral part of Cornwall's clay mining industry. The site served Stannon Clay pit during 1902-2002. Ghosts of this industrial past remain and are key to incorporate within the design

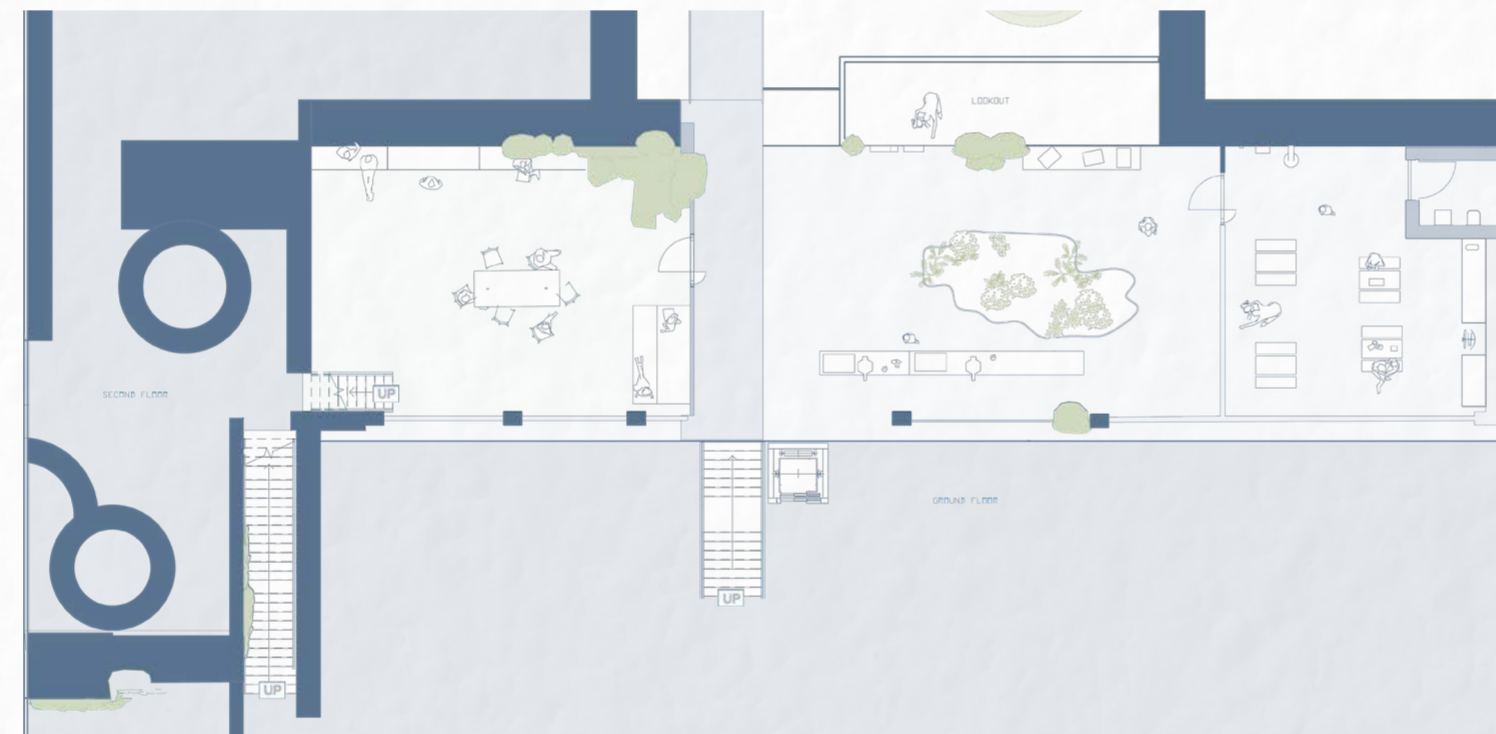
- Clay drags
- Chimneys
- Left over materials



## Floor plans



SECOND FLOOR n.t.s



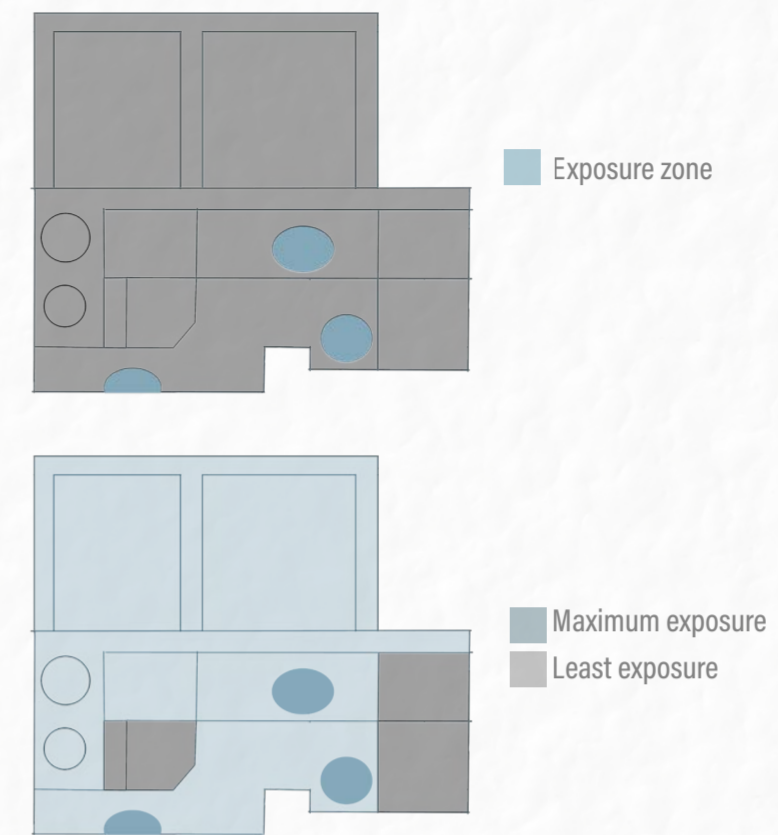
FIRST FLOOR n.t.s



GROUND FLOOR n.t.s

## Strategy diagrams

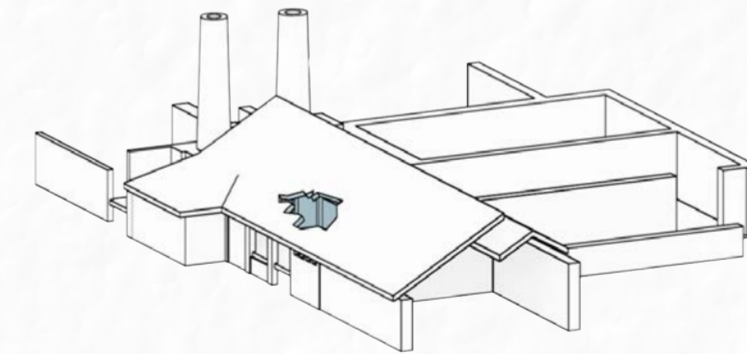
### Exposure zones



An attempt to reduce nature deficit disorder through levels of exposure that allow for both comfortable and uncomfortable spaces.

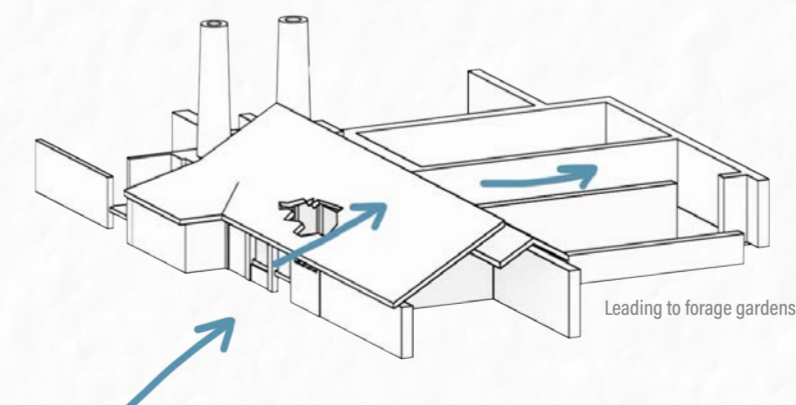
Naturalistic planting that includes vulnerable species, native to Cornwall.

### Selective demolition



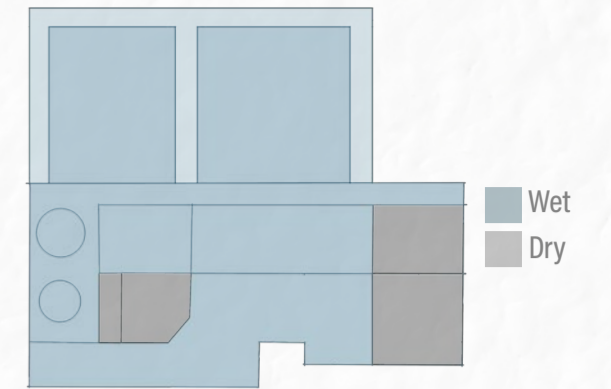
Removal of a section, in this case a partially degraded roof.

### Wildlife commute



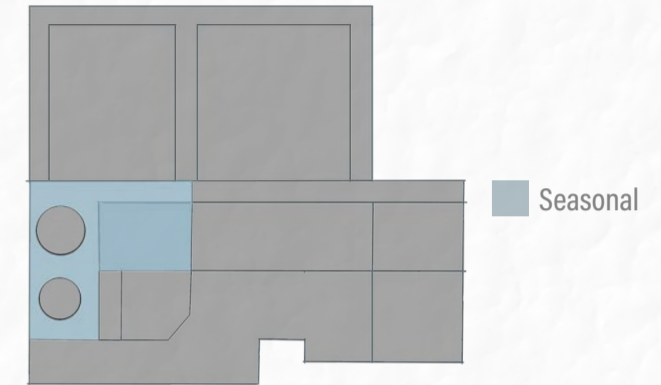
Allowing wildlife to navigate a path amongst the bustle of the office.

### Wet/dry



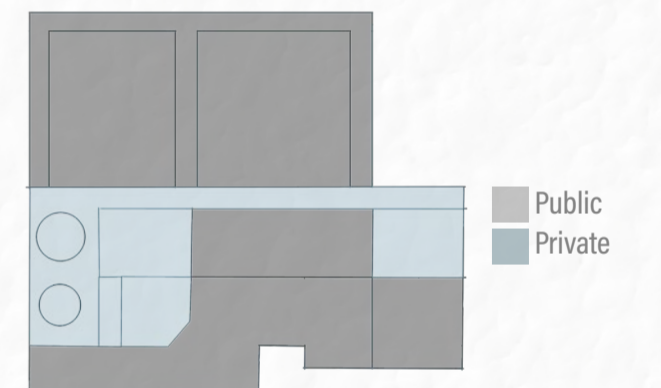
Areas of the building that are open to the elements, allowing rain to come in.

### Seasonal zones



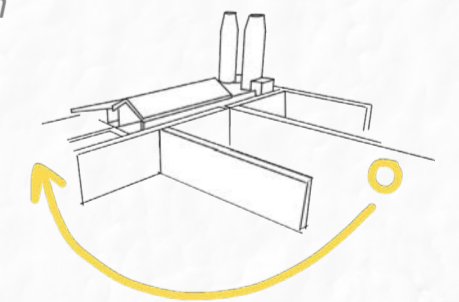
A section of the building to host nature throughout winter without human interference, building ecosystems and habitats. During summer, humans may use the space in a respectful manner.

### Public/private

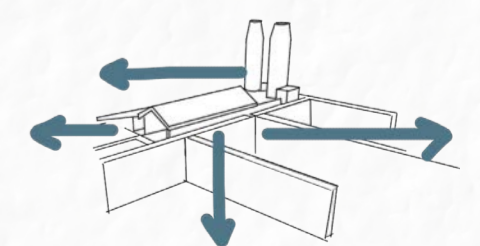


Areas that are private (an office and learning centre) allow office spaces to remain quiet whilst integrating communities.

### Sun path



### Views



# Nature first solutions

## 'Nature Corridor'

Could a creature walk from one end of the site to the other without being inhibited by man made structures?

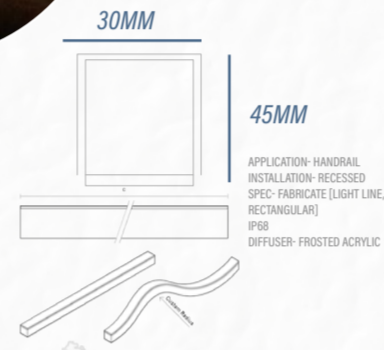
Hireth is built to ground and reconnect users back to their natural roots. Implementing organic materials such as Hemp Flax therma-insulation to insulate the proposed walls, alongside Clayworks wall finishes that allow the building to breathe will make the new insertions healthy interiors. These will be used in combination with existing materials found on site. This is to ensure that the integrity of the site is maintained and the history is held on to. Carefully selected strong materials such as corten, that withstand extreme weather conditions, whilst harmonising with the site and aging beautifully.



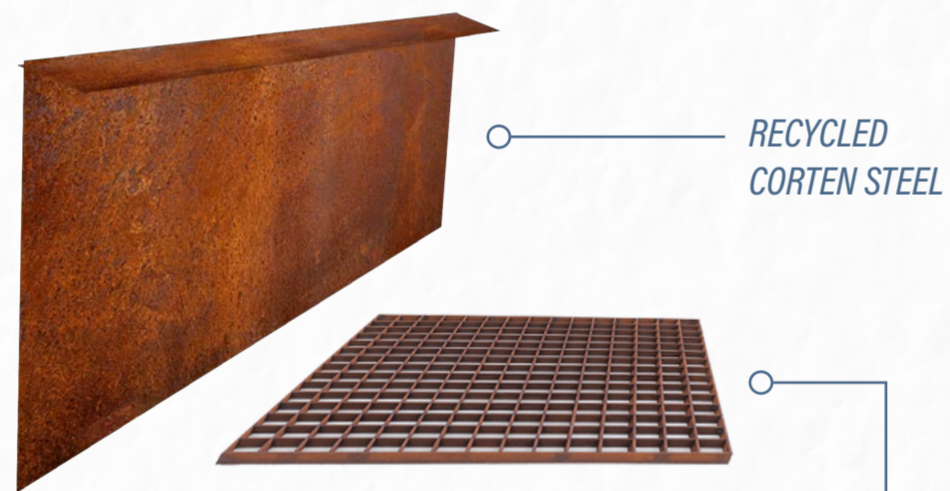
### Bat friendly lighting

Adopting a lighting range from 3000k to 4000k to minimise a cool appearance, which could be harmful to bats and invertebrates.

Lighting fixtures mounted 80mm from the ground to reduce light spill, and minimise light pollution. Integrating lighting that can be controlled and dimmed to reduce glare.

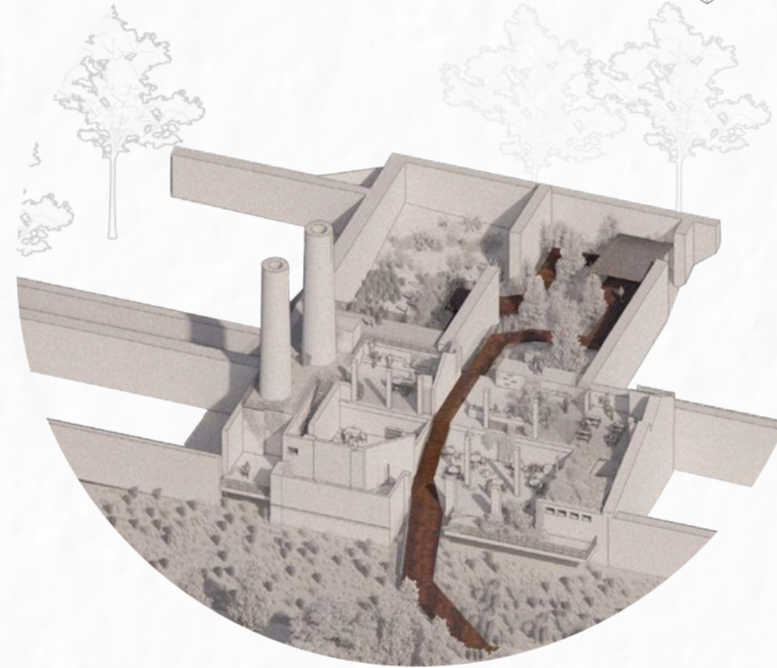


## MATERIALITY



RECYCLED CORTEN STEEL

IRON GRATE



Bespoke fitting n.t.s

CORTEN SHEET BENT INTO SHAPE

SUPPORTED BY IRON POST EVERY 1M

IRON GRATE

IRON GRATE BOLTED TO BOLSTER AND IRON POST

CORTEN STEEL SHEET BENT TO FORM STRUCTURE

30MM AIR GAP FOR LIGHT CABLES

FABRICATE 'LIGHT LINE' SECURED TO CORTEN WITH 50MM LIGHT GAP

CORTEN SHEET

FABRICATE 'LIGHT LINE' SECURED TO CORTEN WITH 50MM LIGHT GAP

BOLSTER AND STEEL POST EVERY 1M TO FASTEN CORTEN SHEET

## 'The Hidden Message'



### GRAFFITI

The site has traces of human intervention through murals created by anonymous artists.

The project aims to highlight the current human intervention, to explore how nature can rebuild itself despite human touch.

### CWT HIDDEN MESSAGE

Followers of CWT often associate words such as 'gentle', 'friendly', 'soft' and 'kind' with the charity. Recently, Cornwall Wildlife Trust has begun to take a more considered, political stance. The Hidden Message also allows the exploration of human voices to fight for nature.

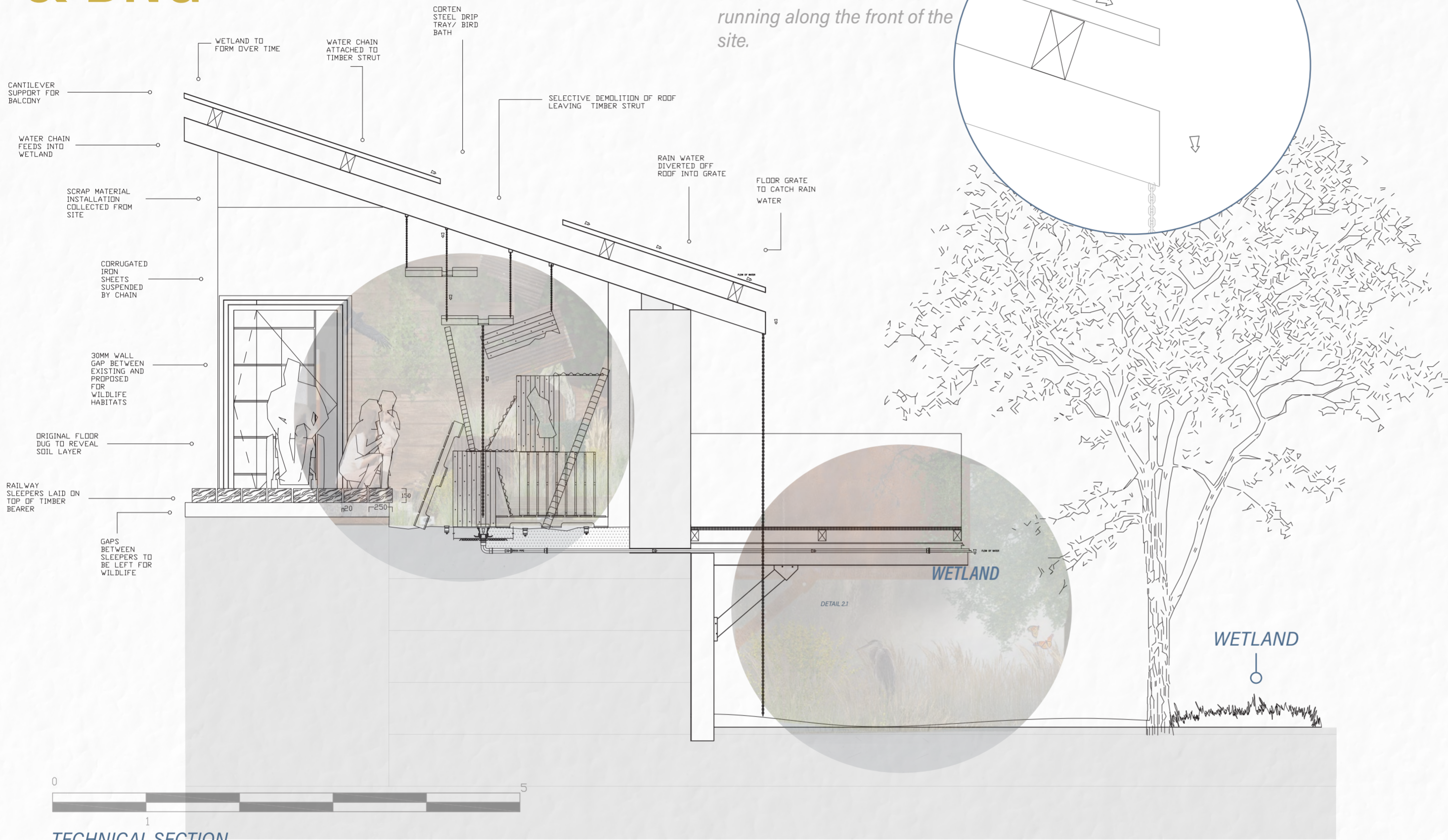
Visitors will be able to acknowledge these hidden messages, even though they are not directly noticeable as soon as you enter the site.



CREATING A CORNWALL WHERE NATURE THRIVES.

# Water circulation & BNG

Areas of biodiversity increase



The system creates a rain poetry, which echoes the sounds of the River Camel running along the front of the site.

## GRASSLAND & WILDFLOWER MEADOW



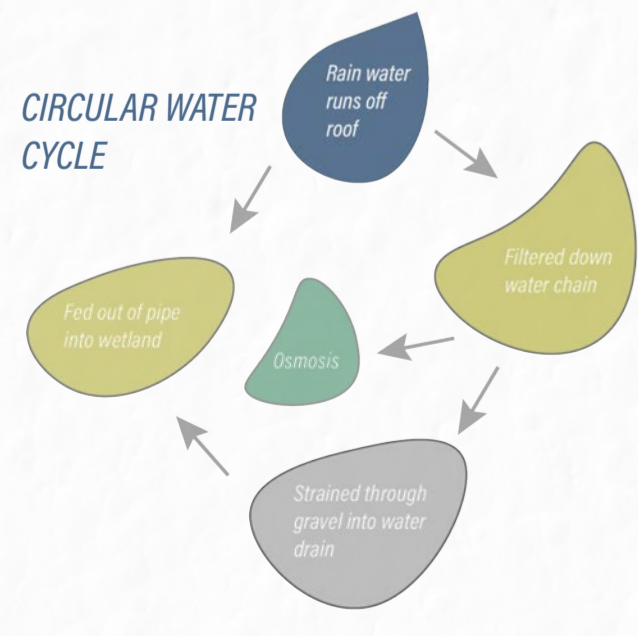
Once established, wildflower meadows create complex root structures which creates stable soil, mitigating flooding. They attract an influx of insects, providing food for birds. Grasslands provide shelter for terrestrial mammals. A mixture of vulnerable native species and supporting native ecosystems.

## EXPOSURE ZONE HABITAT

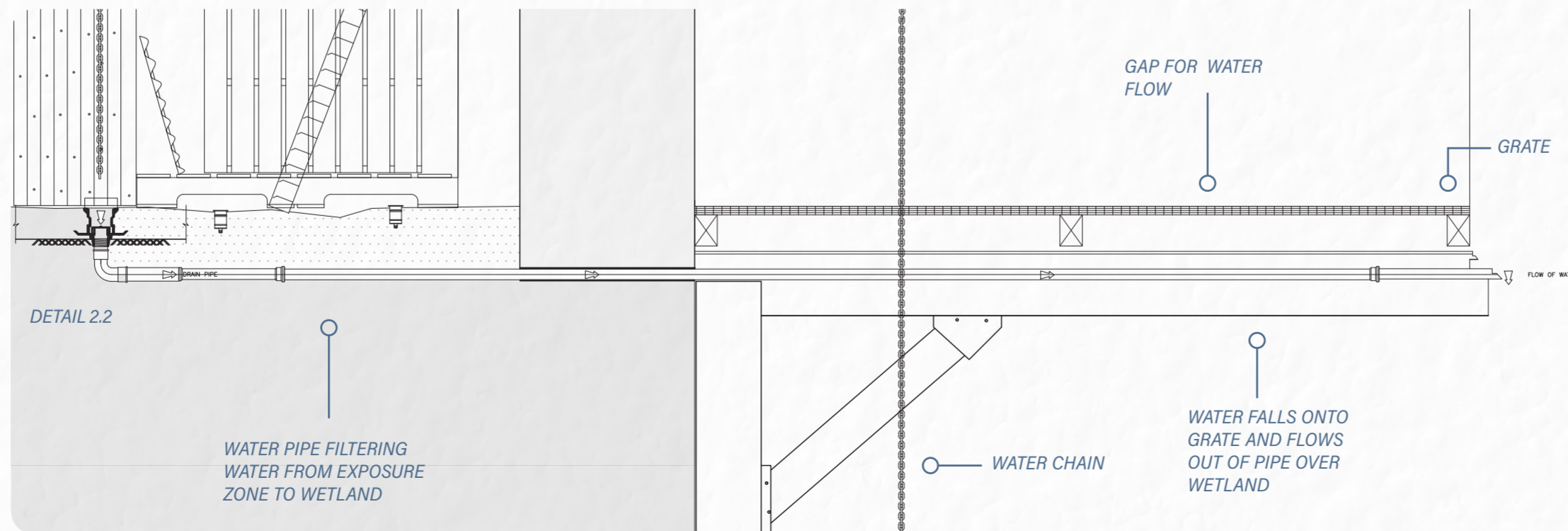


The plantation of vulnerable Cornish species of flora such as ferns and temperate rainforest species will in turn increase the biodiversity of fungi and lichen species.

TECHNICAL SECTION 1:40 @A3



Wetlands sustain a variety of species, and work as natural sponges against flooding, they act as carbon catchers.



## WETLAND



40% of the world's plants and animals depend on wetlands. Whilst providing homes for many endangered species, wetlands also act as carbon catchers, naturally absorbing vast amounts of carbon. They also act to mitigate flooding.

## REWILDING



Phase 1 would see the reintroduction of the water vole [*Arvicola amphibius*], one of the UK's fastest-declining mammals. This species' burrows aerate the soil, optimising microbial activity, subsequently increasing plant growth.

## FORAGE GARDEN



This would supply the food for the Forage kitchen, actively reducing carbon emissions of otherwise importing food. The garden will also provide for creatures; the introduction of pollinators, will see a greater growth to the other habitats on site.