

### PORTFOLIO HAFSA SYED

- AA Diploma, RIBA Part 2, Architectural Designer
- M.Arch at The Architectural Association School of Architecture, London, UK
- BA (Hons) Architecture at University of Westminster, London, UK

#### **Portfolio Contents**

The following body of work explores the intersections of ecology, material culture, and architecture.

It re-imagines architecture as a catalyst—one that unites multi-species communities in the face of environmental crises.



**O1** Fluctuating Flyways page 1



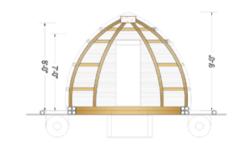
**02** Illuminating the Indus page 08



**03** Living a *Wild*Life page 13



**O4** Texan Typologies page 18



**05** Floating L.O.G page 21



**06** Watermelon Place page 23

ACADEMIC PROJECTS PROFESSIONAL PROJECTS DESIGN AND BUILD PROJECT

## N.E.S.T Network for Endangered Species Typologies

PROJECT	Masters Thesis Project, Diploma 12, Architectural Association, London, UK
YEAR	2023-2024
TUTORS	Inigo Minns, Manijeh Verghese
GRADING	High Pass Grading with AA Distinction Award in Technical Research

N.E.S.T (Network for Endangered Species Typologies) is a distinction-awarded Master's thesis exploring the potential role of architecture in supporting bird conservation. It proposes NEST typologies – self-built, adaptable structures designed to connect birding communities across critical migratory flyways – in the context of the endangered house martin.

By merging contemporary and historic birding practices, it provides spaces for listening to birdsong, a dying citizen science and ecosystem monitoring practice. As such, *N.E.S.T* forms architectural nodes at a local and trans-regional scale, supporting collective observation, knowledge exchange, and ecological stewardship to strengthen conservation networks.



The research draws inspiration from *Hima al-Tyur*, bird towers once translated throughout the Islamic world to collect pigeon droppings as fertilizer. As industrial farming reduces their necessity, *N.E.S.T* seeks to revive their cultural function known as *Islah* – translating to peacemaking and 'reform' – focused on repairing relationships between humans and nonhuman species.

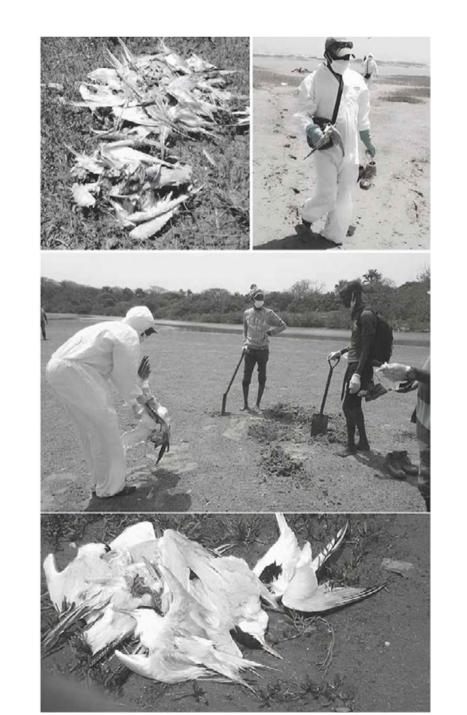


Adapted pigeon tower typology for the 'Kotu Creek' birding community in The Gambia – integrating local material culture with birdwatching practices

#### Repair, Reallocate, Restore

In 2023, Gambia's Kotu Creek wetland, a vital wintering ground for house martins, suffered a devastating avian flu outbreak, killing over 7,000 birds. The Gambian Bird Watchers' Association, with limited resources, mobilized hundreds of volunteers to bury the birds. Every year, they seek international funding and support for conservation efforts.

The *N.E.S.T* proposal envisions a network of sites promoting cross-geographic communication and financial redistribution along migratory flyways. By translating ecological barometers, the project preserves material cultures and highlights plural ways of caring. Architects act as facilitators, channeling resources to promote ecological and cultural preservation.



Archival images of The Gambia's 2023 Bird Flue Outbreak, sent by 'Yaya Barry' the head of the Bird Watchers Association in the Gambia







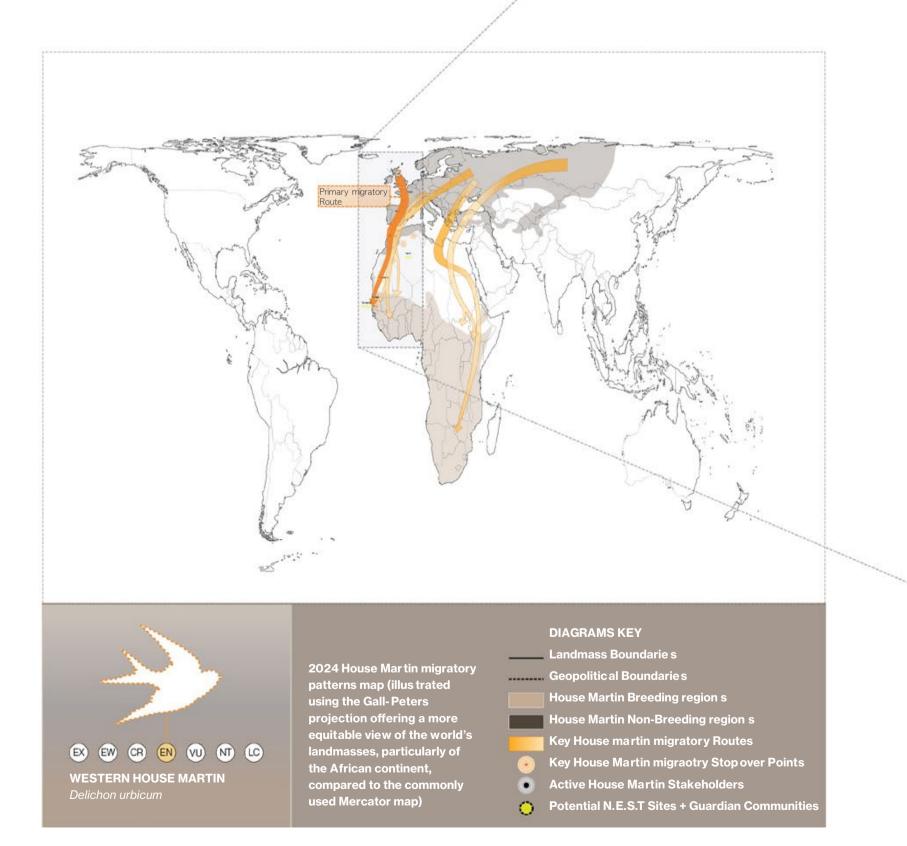


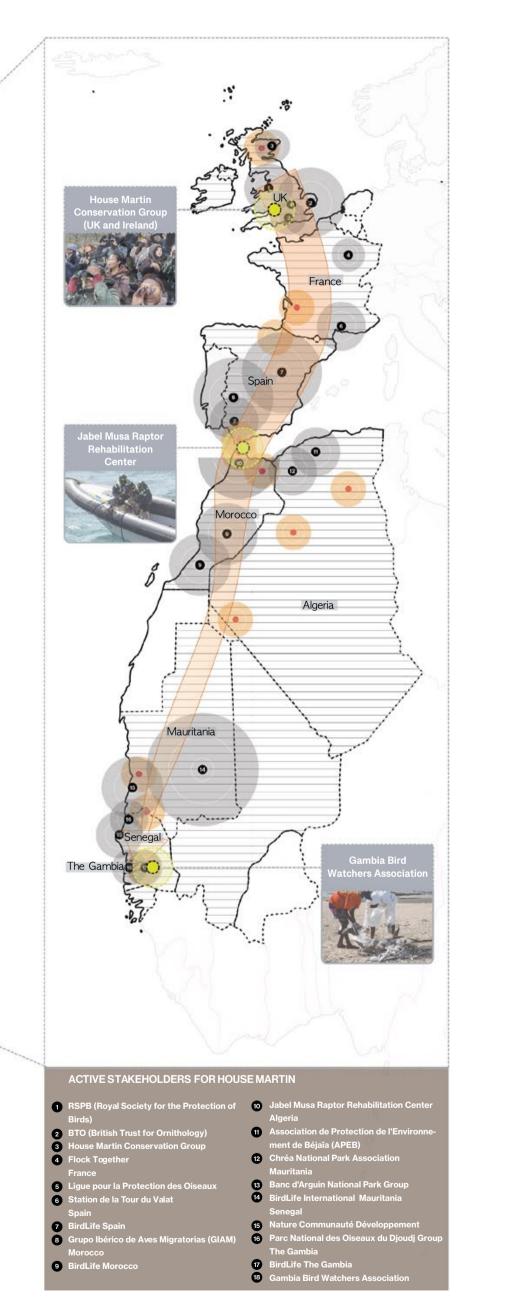
Interior View of entrance to Storage and Contemplation Chamber of Gambian NEST

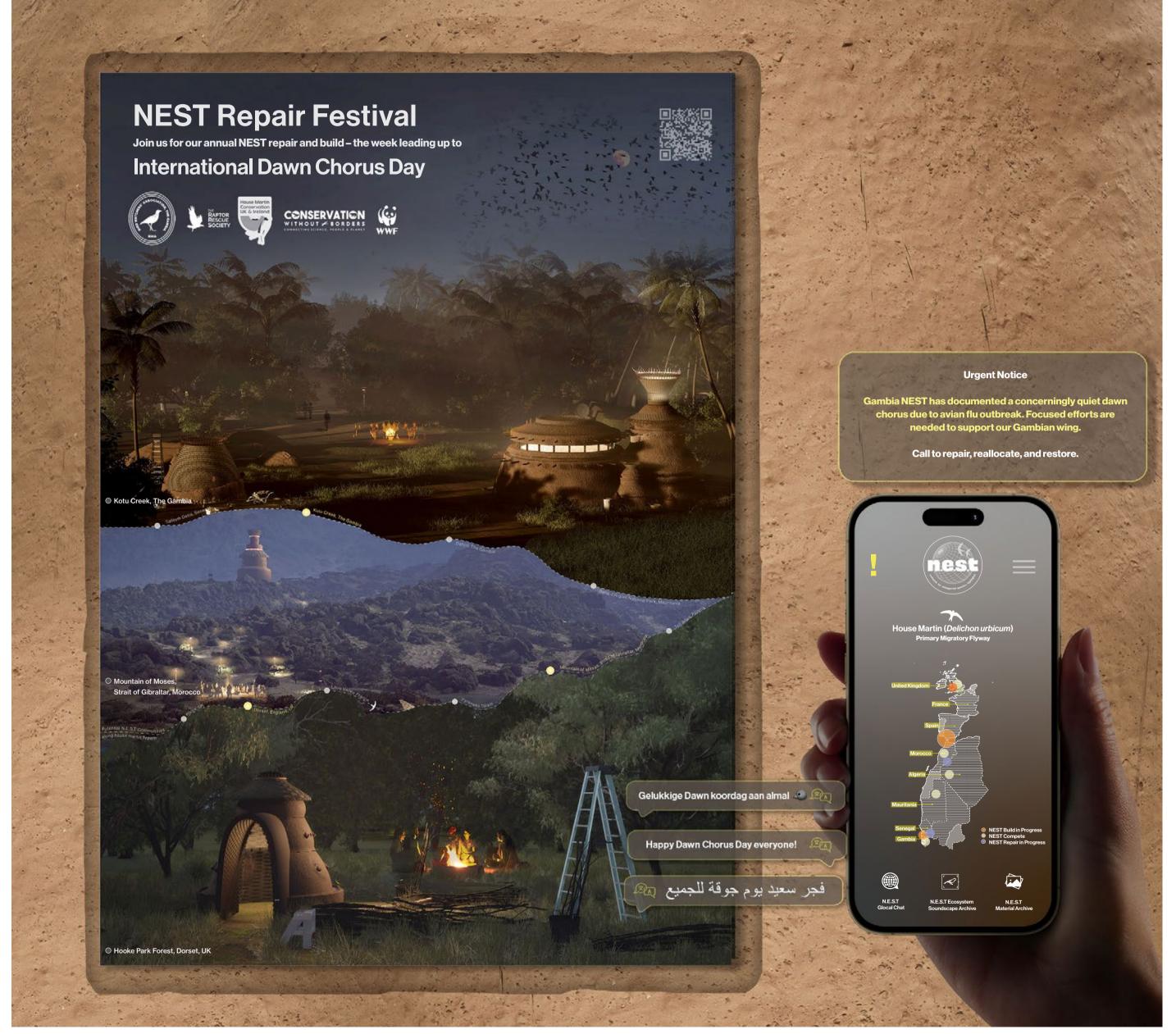
#### **New Rituals of Care**

The dawn chorus – the collective vocalization of birdsong at dawn – serves as an acoustic marker of ecosystem health, an interspecies dialogue fading from human memory. *N.E.S.T* proposes the creation of local structures for deep listening, reconnecting listeners to this embodied citizen science and historic, cross–cultural ritual practice.

These self-built pilgrimage sites provide a distinct yet adaptable typology for birding communities, fostering new rituals such as the *Nest Repair Festival*, where communities rebuild and expand their NESTs. For the endangered house martin, this exploration connects key summer grounds in the UK reaching wintering sites in The Gambia. Translated across geographies, *N.E.S.T* becomes a living archive of ecological knowledge and local material culture.







N.E.S.T communities are encouraged to join the Repair Festival, held a week before International Dawn Chorus Day (celebrated annually on May 4th, where birdwatchers tune in live to listen to the consecutive chorus across the globe)

#### **Developing the 'British NEST'**

In an age dominated by globalized supply chains, my work emphasizes the importance of locally sourced, bio-based materials. Through designing a 'British NEST,' I brought these principles to life using local willow weaving techniques and cob (adobe) construction.

By hosting community workshops, I tested the material properties of willow at a 1:1 scale, documenting its tensile strength, flexibility, and suitability for collective weaving. This process led to the curation of weaving patterns that are structurally robust yet accessible for beginners, ensuring both durability and ease of construction for the 'British NEST' prototype.



Test 1: Community workshop for 1:1 living willow tunnel



Test 2: Community workshop for 1:1 living willow dome



Test 3: Community workshop for 1:1 living willow arbor



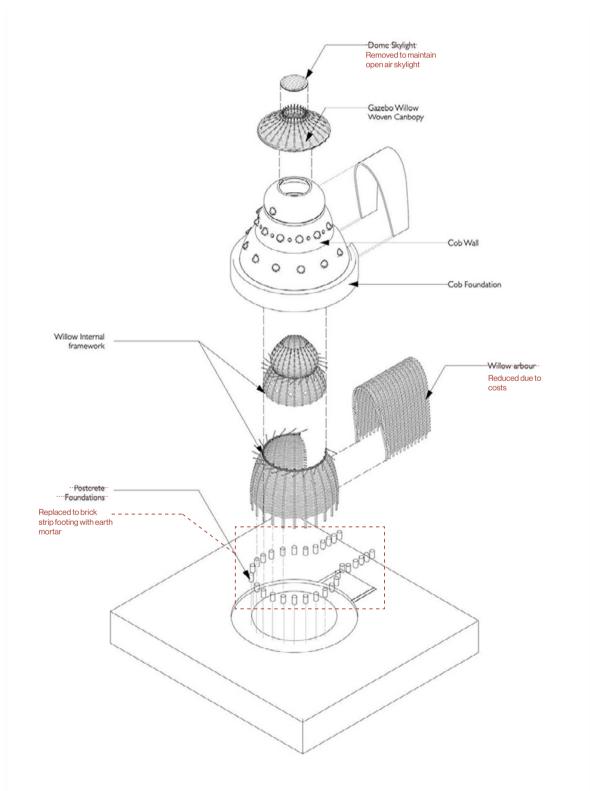
Interior of 1:1 NEST prototype built in Hooke Park Woodland, Dorset, South West, England

)4

#### Weaving a NEST

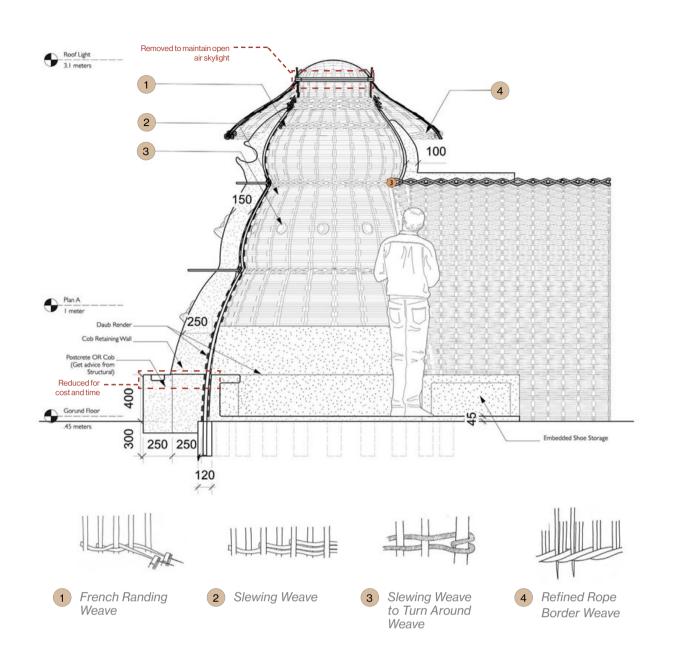
The building process, termed *communal nesting*, emphasizes an approach that goes beyond construction – focusing on cultivating community bonds through collaborative weaving and building.

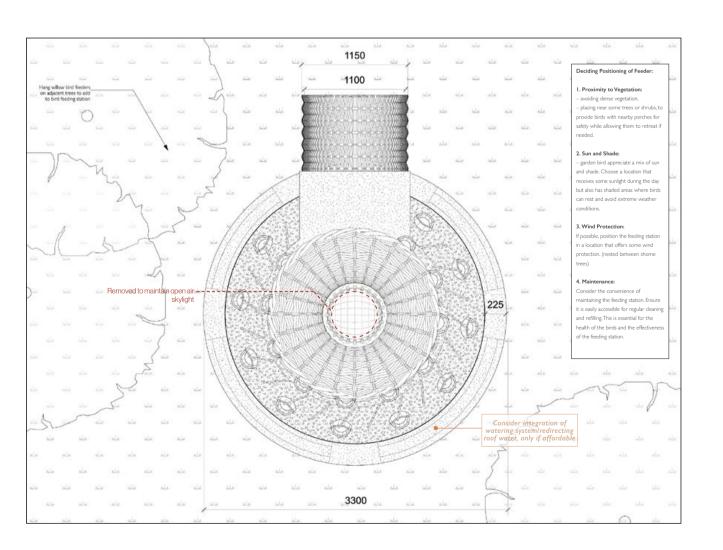
Communal nesting becomes a spatial act of ecological stewardship – encouraging more symbiotic and informed relationships between humans, the immediate environment, the material life of a built structure, and the species that interact with the NEST.



--- Elements adapted on site, during build process

Architectural drawings that evolved on site in response to site conditions and changing funding parameters, illustrating the adaptability required in leading the design and build construction process







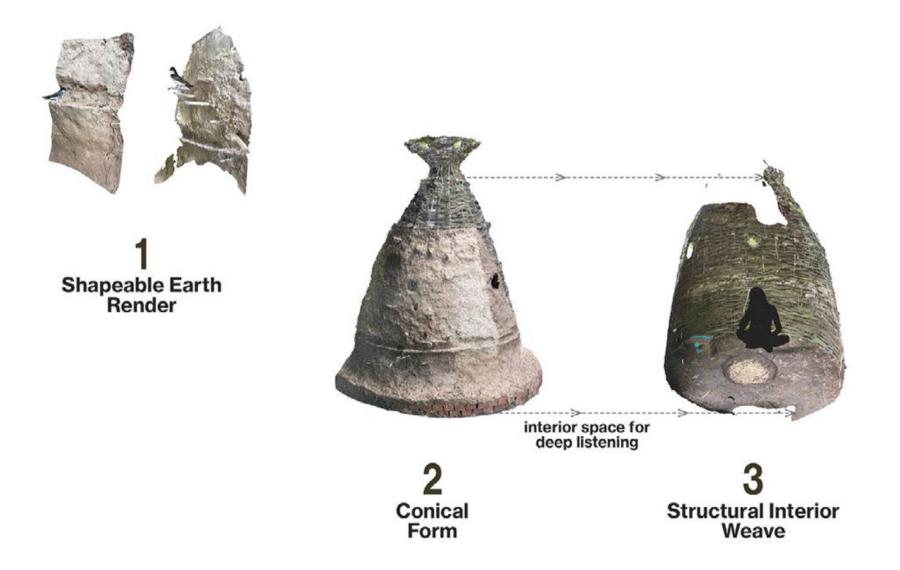
#### The NEST Typology

#### A mutispecies ecosystem barometer

A proposed NEST is a collectively-built, adaptable typology that celebrates regional differences through local weaving and earth construction methods. It serves as a living document of environmental health, based on it's observed multi-species interactions.

The primary framework for a NEST typology entails:

- 1. Exterior earth render adaptable for nesting and feeding spaces for local songbirds.
- 2. A conical form designed for deep listening to the local bird eco-scape, overtime developing bird identification skills for citizen science
- 3. A structural interior weave translatable vernacular across regions
- **4. Refined yet beginner-friendly weaves** foster community through collective weaving, developed and tested through hosting multiple workshops in community gardens





4
Refined yet
Beginner-Friendly
Weaves



Snails inhabiting cob niche, with cantilevered willow for perching songbirds

Common Blue mint beetle (Chrysolina coerulans) attracted to birdseed niche of NEST

NEST interior with birdseed - encouraging rituals of feeding and listening

"Humans are not separate from the web of life; we are kin to all living things, co-evolving in symbiotic relationships."

- Donna J. Haraway



A locally endangered Blue Tit (Cyanistes caeruleus) documented visiting and feeding on the completed and constructed NEST structure

# Illuminating the Indus Decentralized Epistemologies of Ecology

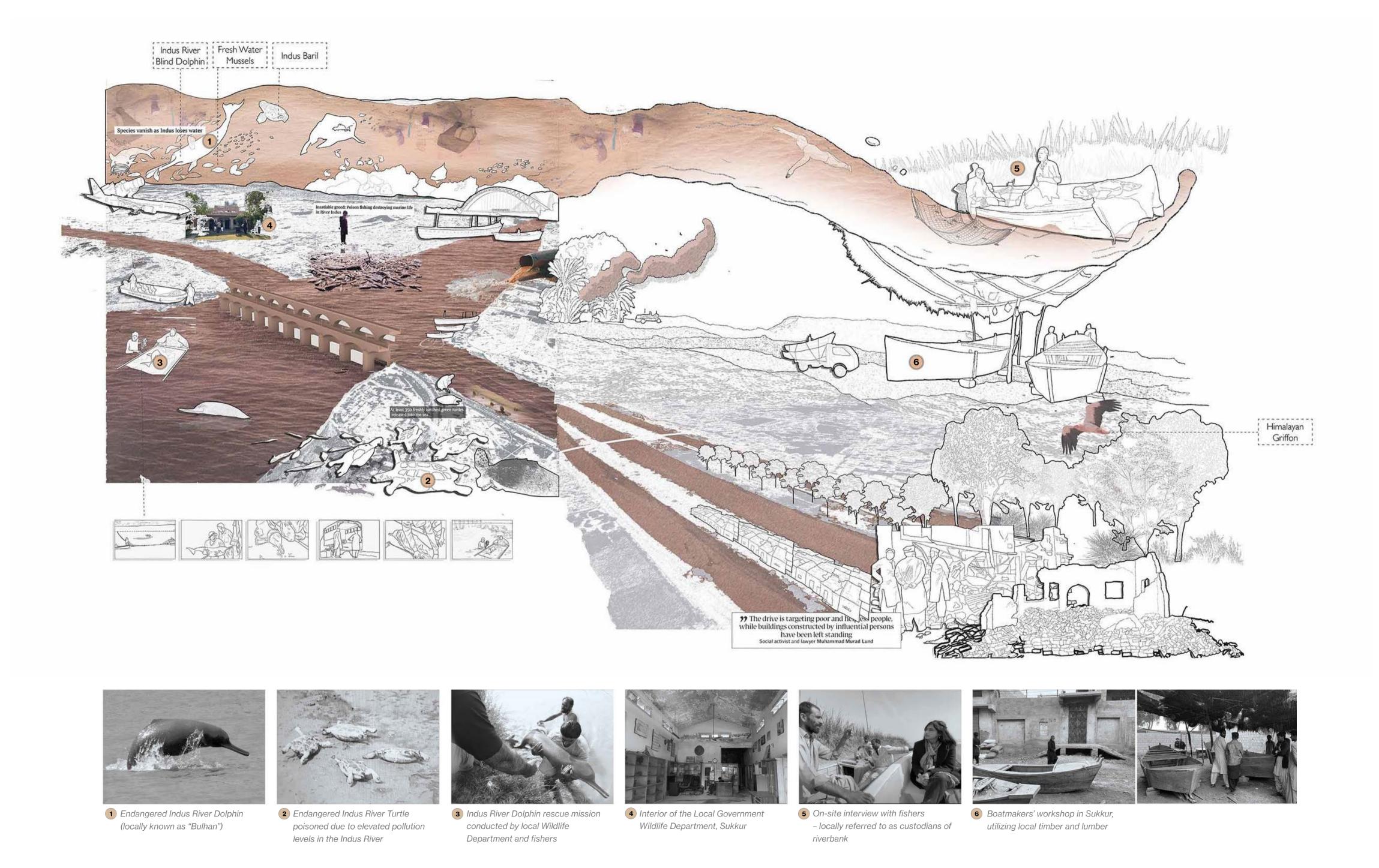
PROJECT	Academic Research Project, Diploma 13, Architectural Association, London UK
YEAR	2022-2023
TUTORS	Merve Anil, George Masood
GRADING	High Pass Grading with <b>Distinction in Technical Research</b>

Illuminating the Indus is a grant-awarded research and design proposal developed in collaboration with the Sindh Wildlife Department in Sukkur, Pakistan. The project introduces a counter-mapping method for the Indus River, challenging colonial portrayals that have long marginalized indigenous and local ecological knowledge.

Building on ongoing local efforts to protect the endangered Indus River Dolphin, the project proposes a decentralized, community-driven approach to ecosystem monitoring and river mapping, focusing on collective stewardship for sentient lifeforms along the threatened Indus Riverbank ecosystem.



Full Project Video



#### **Colonial Cartographies**

Sukkur is home to the first barrage constructed on the Indus River during British colonial rule in 1932, marking the infrastucural taming of the lnuds river and its ecologies. This thesis critiques the colonial gaze, evident in cartographic representations of the river - readings that that ignored countless indigenous understandings of the river's ephemeral nature, reducing its dynamic ecologies to a static line.

This "extractive gaze" persists in the 1990s captive scientific research on the endangered Indus River dolphin. As such, the thesis seeks to subvert this perspective - by positioning the architect as a





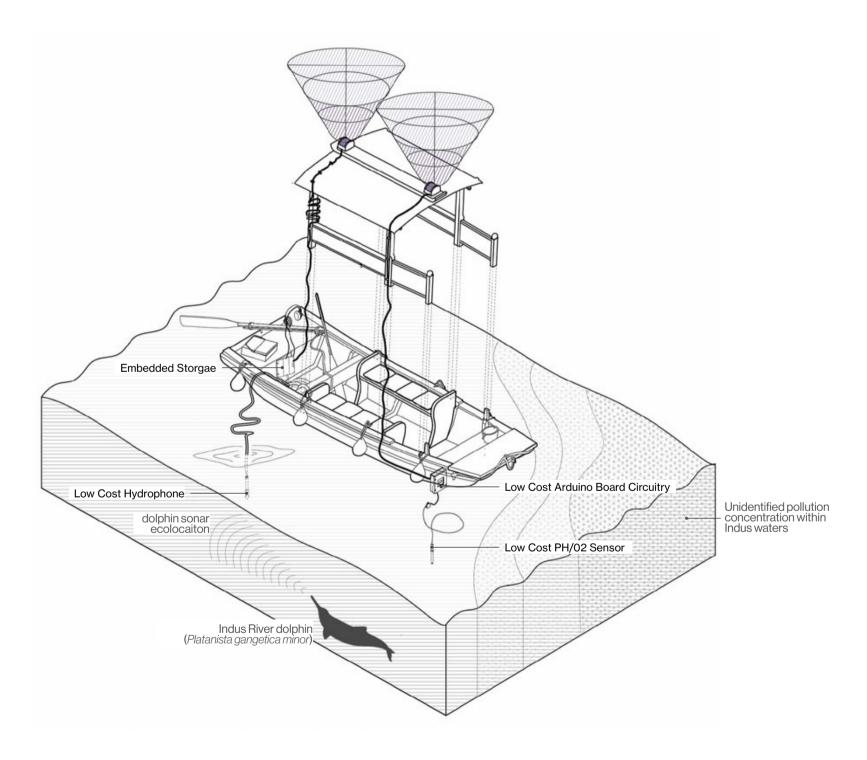
Redesigned office space for Mr. Adnan, the head of the Sindh Wildlife Department in Sukkur, Pakistan.

#### The Indus River Dolphin

#### From Extraction to Care

Of a total of six species of river dolphins in the world, all of which are globally endangered, the Indus River dolphin (*Platanista gangetica minor*) is the only species whose population is currently on the rise, primarily due to ongoing conservation efforts by the Sindh Wildlife Department in the Sukkur region.

Illuminating the Indus builds on existing initiatives but introduces researched, passive, and non-invasive monitoring systems, giving agency to sentient lifeforms and creating a publicly accessible form of spatial mapping.



- Light Indicator Key:
- Indus River Dolphin Species Detected
- Immediate Habitat Threatened
- Habitat at Baseline Health

Indus River Dolphin Detection Vessel



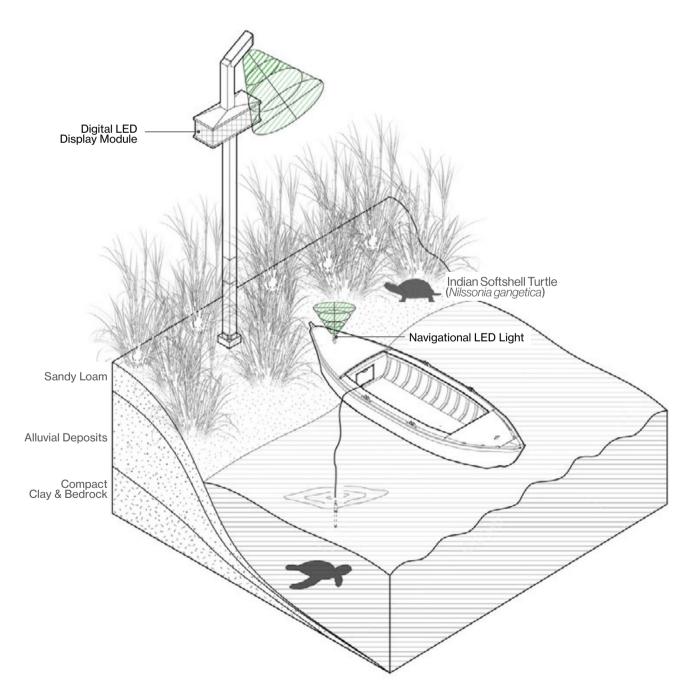
Proposed acoustic monitoring of the Indus River Dolphin population, integrating hydrophone passive monitoring as a non-invasive alternative to current data-tagging methodologies

#### **Community Driven Monitoring**

According to the United Nations Environmental Programme, approximately 55 cubic kilometers (km³) of wastewater are dumped into the Indus every year.

As of 2023, the Indus River was recognized as the second most polluted river globally, in terms of plastic concentration. This project, however, diverges from traditional top-down approaches to address the mutilated infrastructural and political challenges of contested Indus ecosystem, instead emphasizing monitoring and zoning strategies as means of fostering sustainable change.

Local boat makers are proposed to collaborate with a public university lab focused on pollution-detecting sensors, pH, and oxygen monitoring. By connecting them with fishers and existing research initiatives, a collective effort to fabricate environmental monitoring infrastructure begins to take shape.



Light Indicator Key:

Indus River Dolphin Species Detected

Immediate Habitat ThreatenedHabitat at Baseline Health

Live Aquatic Pollution Monitoring and Zoning Infrastructure







Submerged perspective, with pH sensors to monitor endangered Indus River Turtle habitat

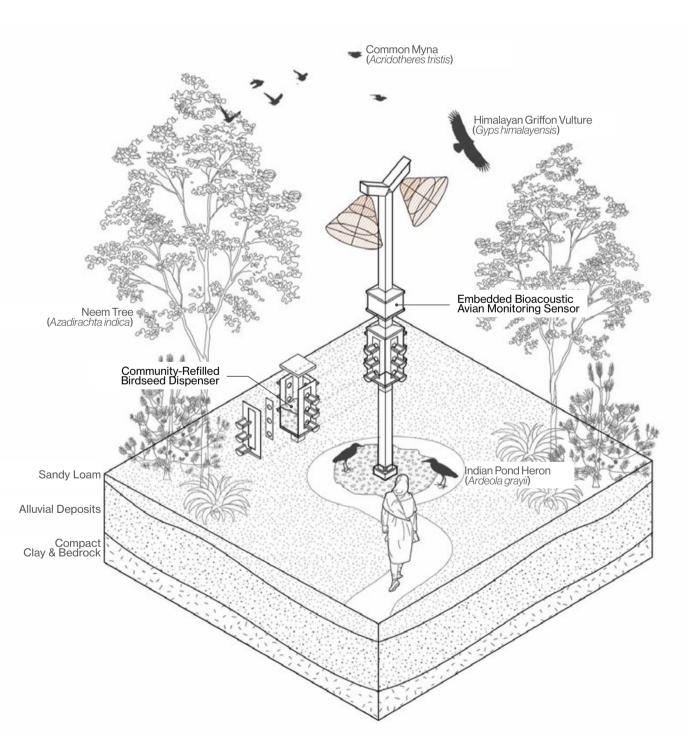


Local boat-makers rigging-up boats with environmental monitoring sensors

### Towards Collaborative Conservation

In a speculative future, I envision the expansion of the Sindh Wildlife Department in Sukkur – an underfunded yet impactful body that has successfully facilitated collaborations with local fishers, community members, and international funding bodies.

The proposal positions the Indus River Dolphin as a catalyst, enabling fishers, dolphin researchers, artists, and the local public to become active collaborators in ecosystem monitoring, fostering decentralized methods of ecosystem care.



Light Indicator Key:

Indus River Dolphin Species Detected

Immediate Habitat ThreatenedHabitat at Baseline Health

Avian Acoustic Monitor and Communal Bird Feeder







Fishers, dolphin researchers, boat makers, and wildlife department collaboratively deliberating conservations strategies



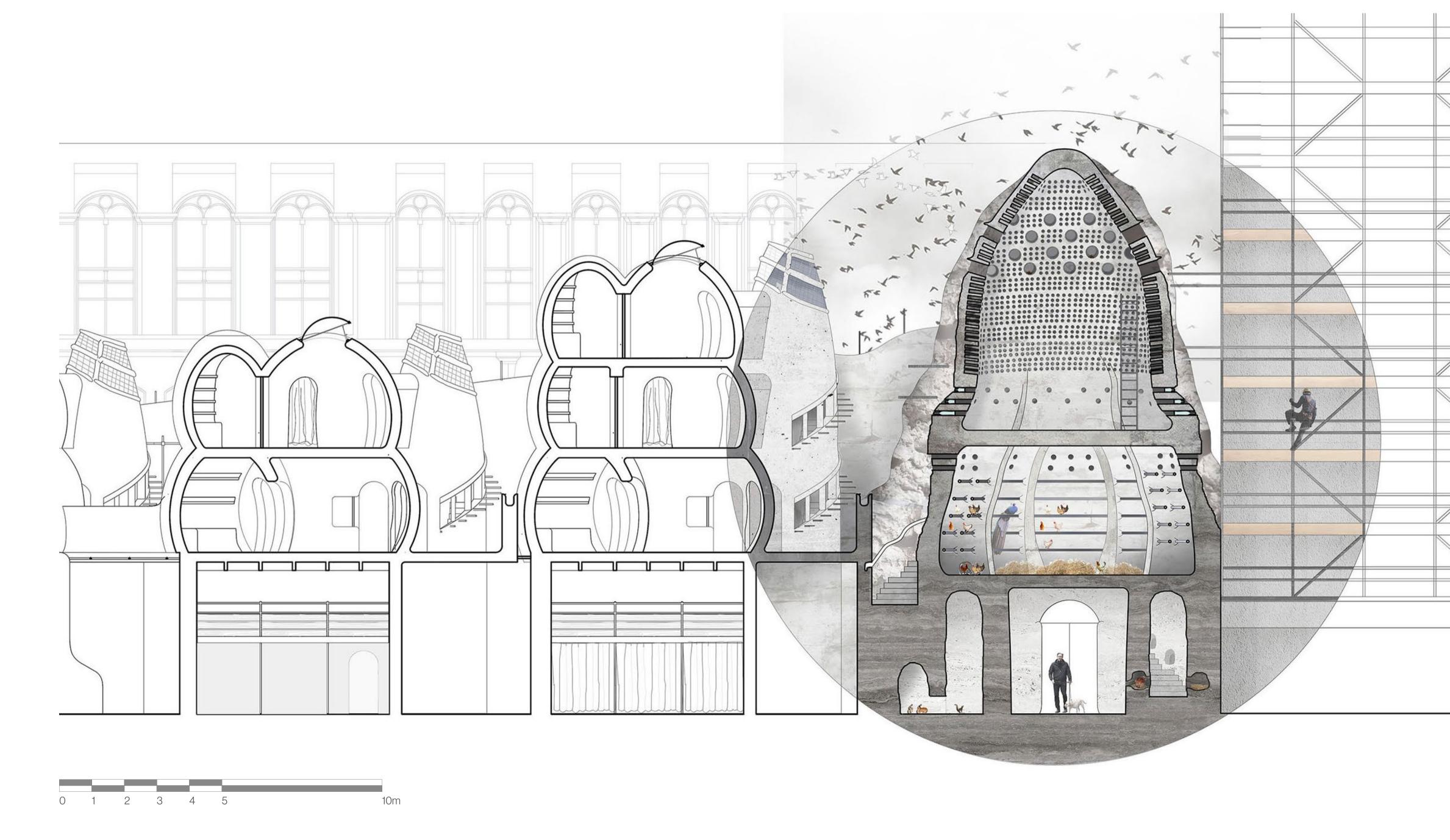
The Indus River Dolphin as a tool for community mobilisation and the expansion of the Wildlife Department in Sukkur, Pakistan

# Living a WildLife Ecological Enclave in the City

PROJECT	Academic Project, Year 3 Undergraduate, University of Westminster, London, UK
YEAR	2021
TUTORS	Jane Tankard, Thomas Grove
GRADING	Honors Grading with <b>RIBA Silver Medal Nomination</b>

Living a WildLife is a RIBA Student Award-nominated project that re-imagines urban living in Southwark, London, UK.

Designed for a post-COVID19 landscape, it caters to city dwellers who have become complacent in their antisocial dwellings, seeking to combat feelings of isolation by reconnecting humans with nature and our memories of the forest – creating a bio-diverse haven that exists to challenge sterile urban visions of the modern metropolis.



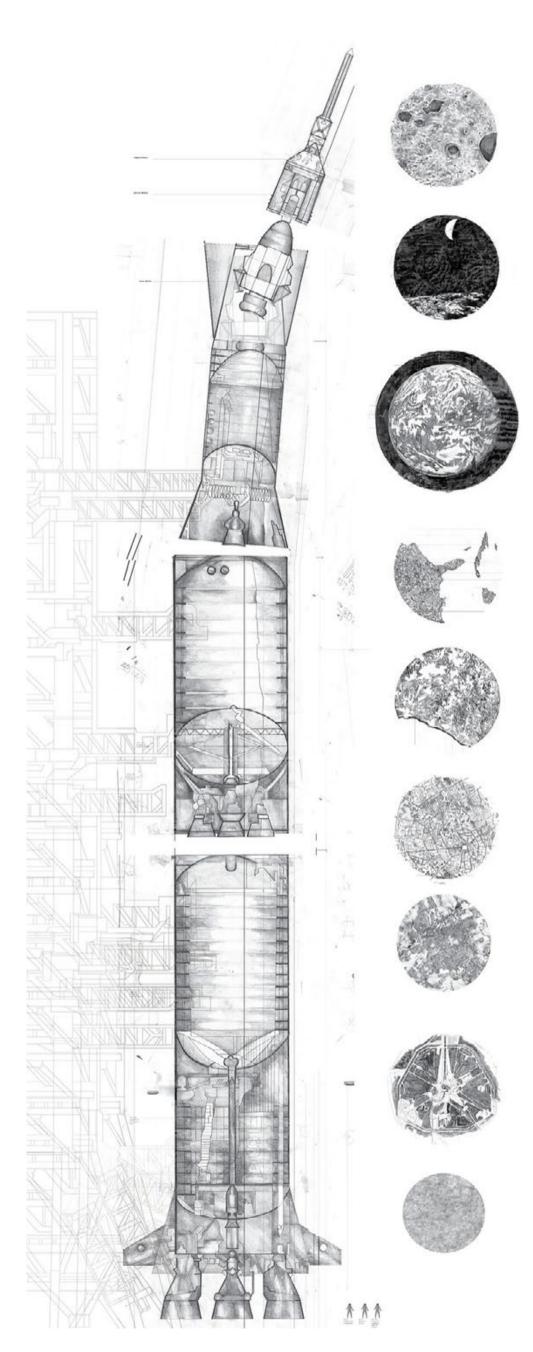
#### The Cognitive Shift Effect

In 1969, the Apollo 11 Moon mission refocused our gaze on Earth, revealing it as a jewel in the darkness, abundant with greenery, water, and life.

Living a WildLife learns from this perspective, shifting focus to the adaptive wildlife thriving in an underused car park in Southwark in central London. The design transforms the site into an off-grid living environment while observing and protecting urban wildlife.



Nonhuman inhabitants of an underused car park in Southwark, London, UK



Sectional sketch of the Apollo 11 space module, used as a design development methodology, superimposed on-site

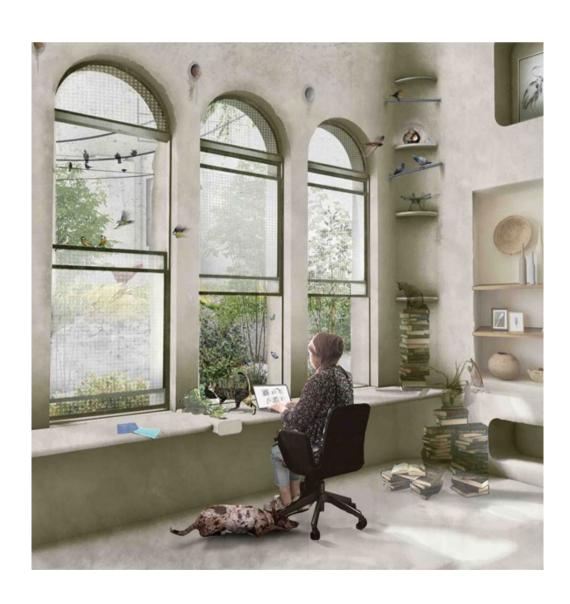


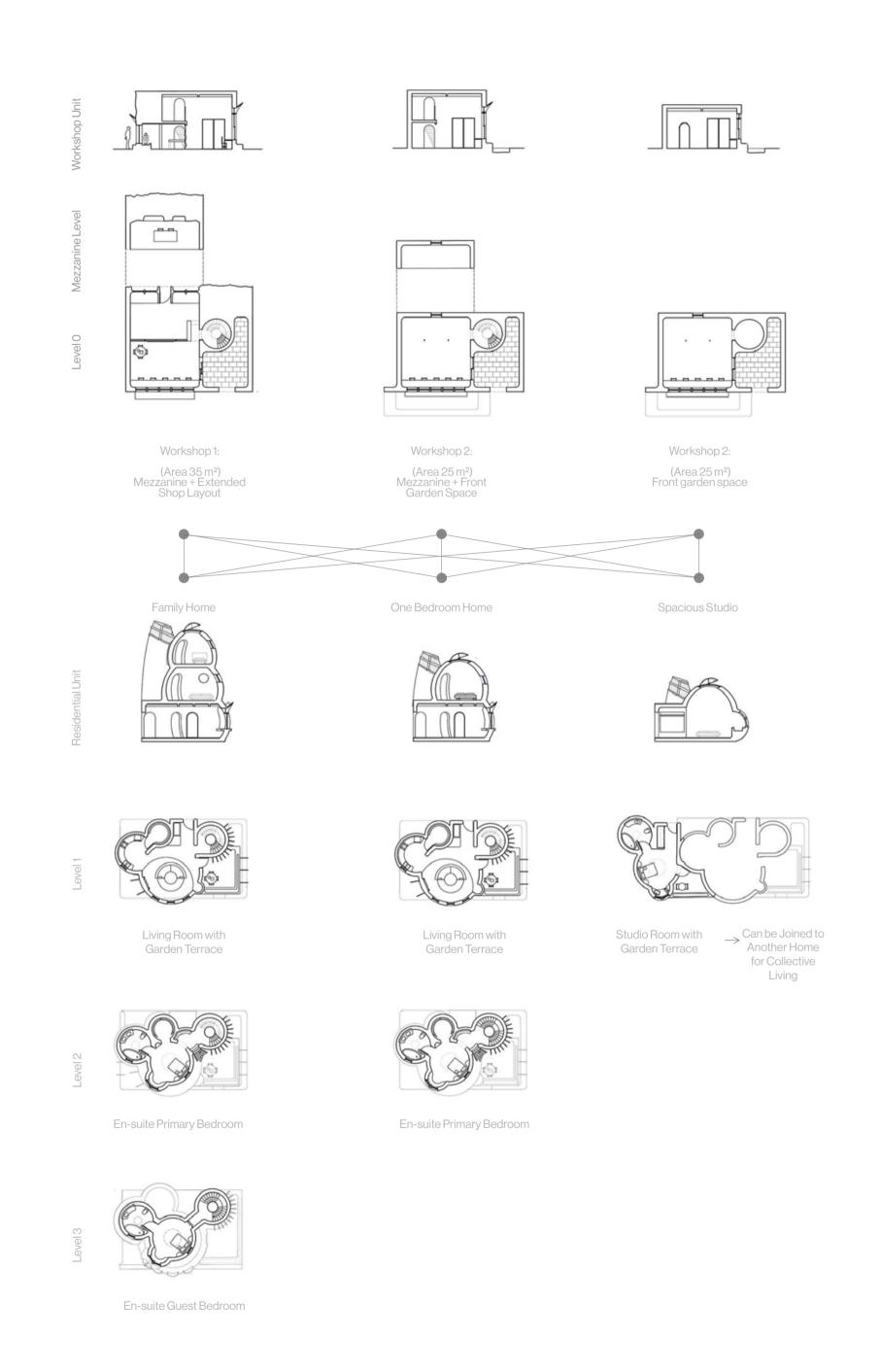
Settlement view and plan, with a dense perimeter to create a micro-climate within the site, fostering urban biodiversity

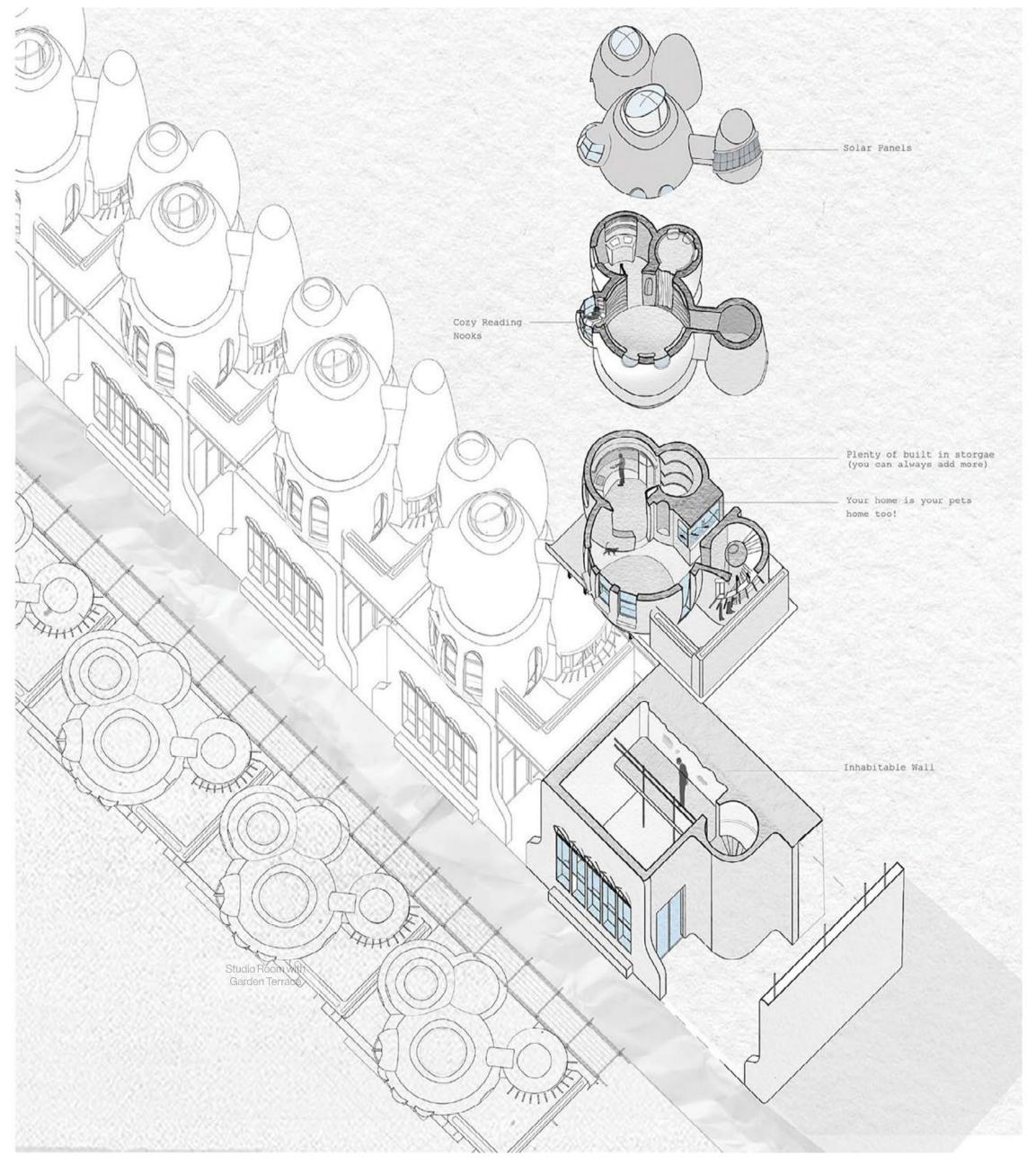
#### The Inhabitable Home

Living a WildLife provides residents with a variety workspaces and home typologies to choose from. The buildings become living micro landscapes – environments that can be burrowed into and added onto.

The scheme is massed so that three housing types are each available with three workshop options.



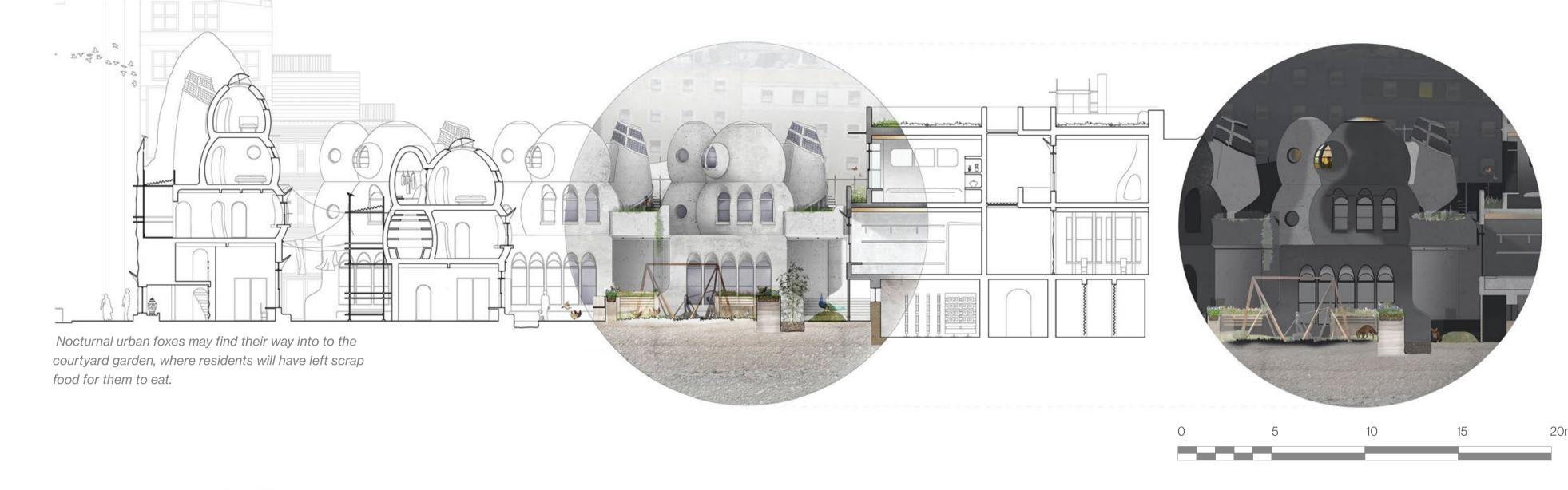


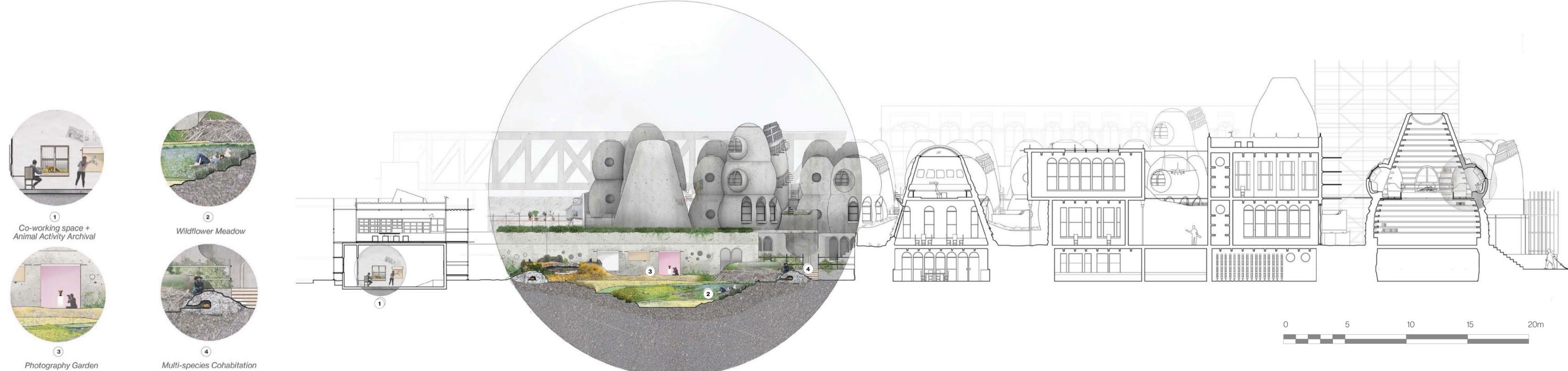


The Inhabitable home-office typology, with walls that can be borrowed into by residents

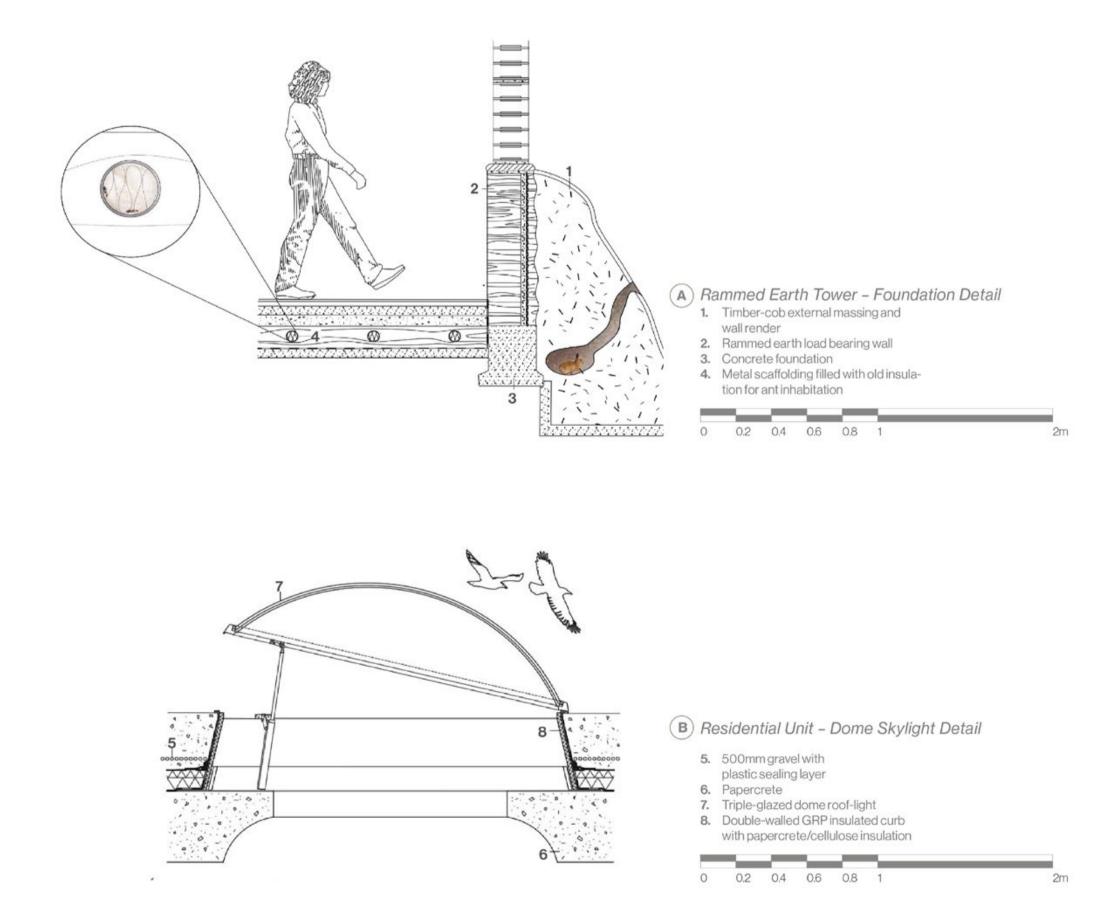
### Re-imaging the 'Woods'

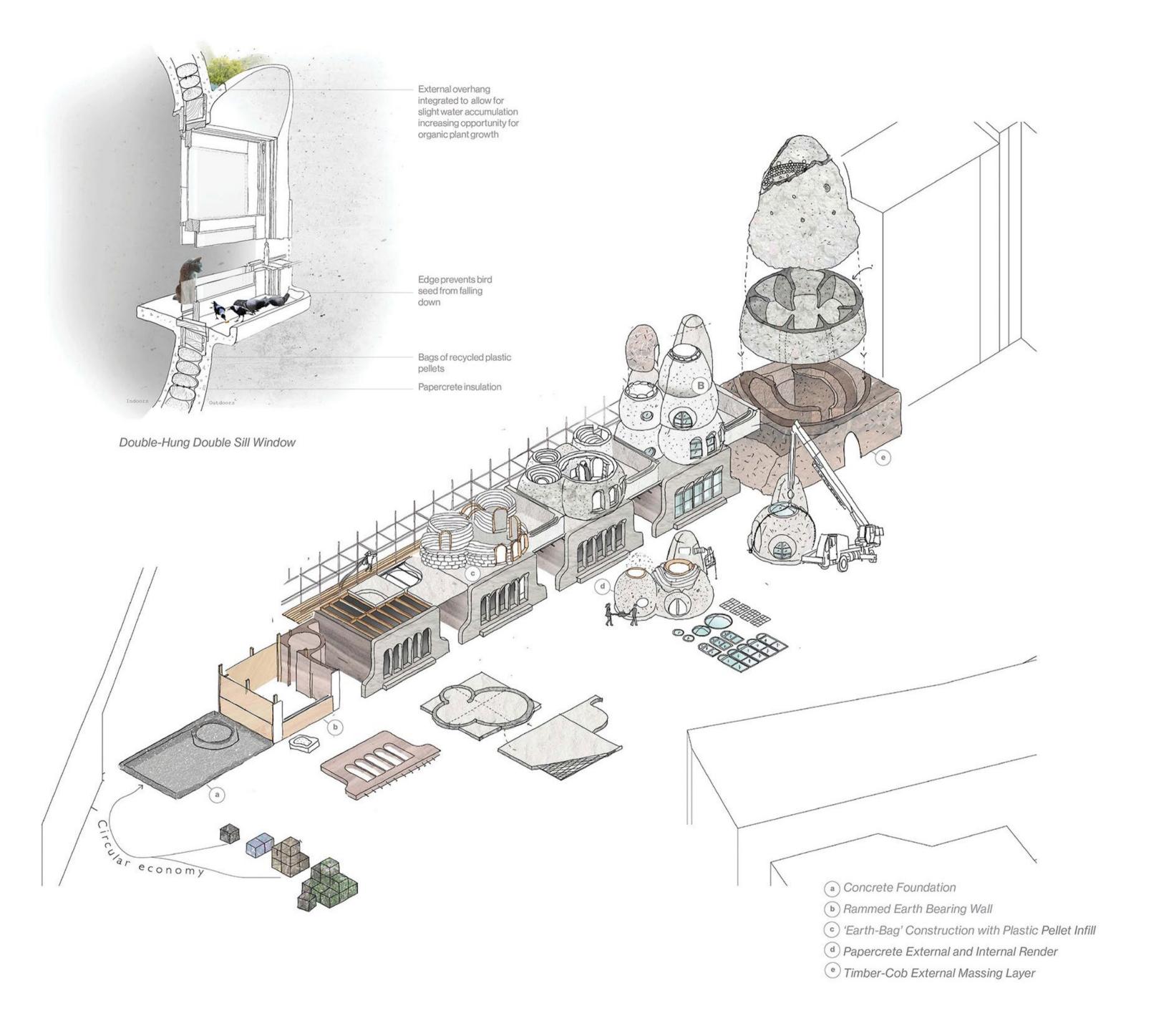
The thesis understands the modern metropolis as a constructed landscape, blending the natural and man-made in architectural symbiosis. Inspired by the patterns of a temperate forest environment, the massing forms a dense perimeter with varying levels of permeability, creating a micro-climate within the site that allows specific urban species to thrive.





On January 2018, China banned the import of most plastic and paper waste, disrupting global recycling patterns. As a result, 2,500 metric tonnes of unrecyclable refuse were redirected, much of which is now buried in UK landfills, camouflaged under landscaped mountains for urban leisure. This speculative proposal of repurposing waste material at an architectural scale served as a speculative starting point for my current interests – exploring circular construction methods by integrating vernacular techniques with sustainable material technologies.





# Texan Typologies Houston, Texas, USA

OFFICE	Brett Zamore Design, Houston, Texas, USA
YEAR/STATUS	2022/Built
OFFICE	Architectural Assistant (RIBA Part 1)

Texan Typologies details my work at Brett Zamore Design, an AIA-licensed, LEED-accredited architecture firm based in Houston, Texas, specializING in sustainable residential design with a focus on prefabrication and adaptive reuse.

Using BIM modeling, I refined my expertise in design detailing, emphasizing high-performance building envelopes, material efficiency, and energy optimization strategies.

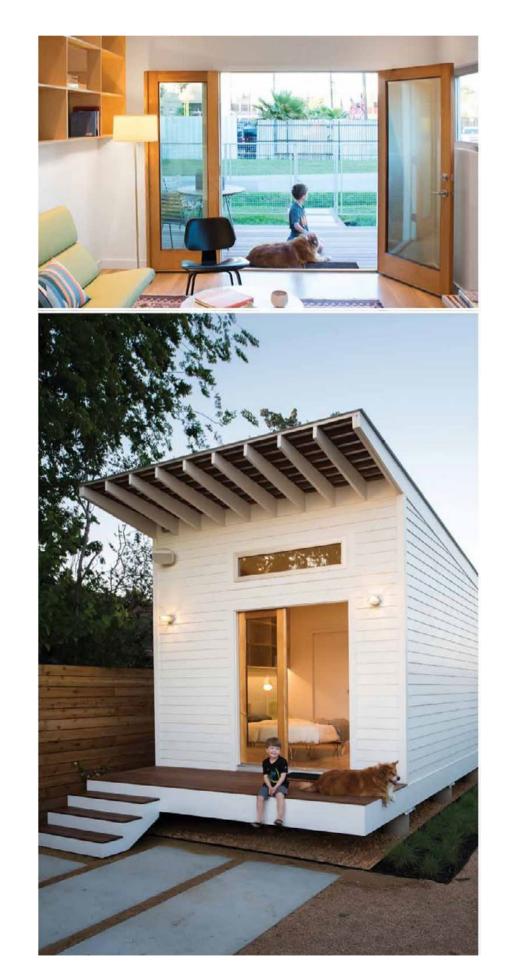


Image of the built zFAB, a typology for which I produced the drawing set during my work experience, under the supervision of the managing architectural designer. Image is property of Brett Zamore Design.

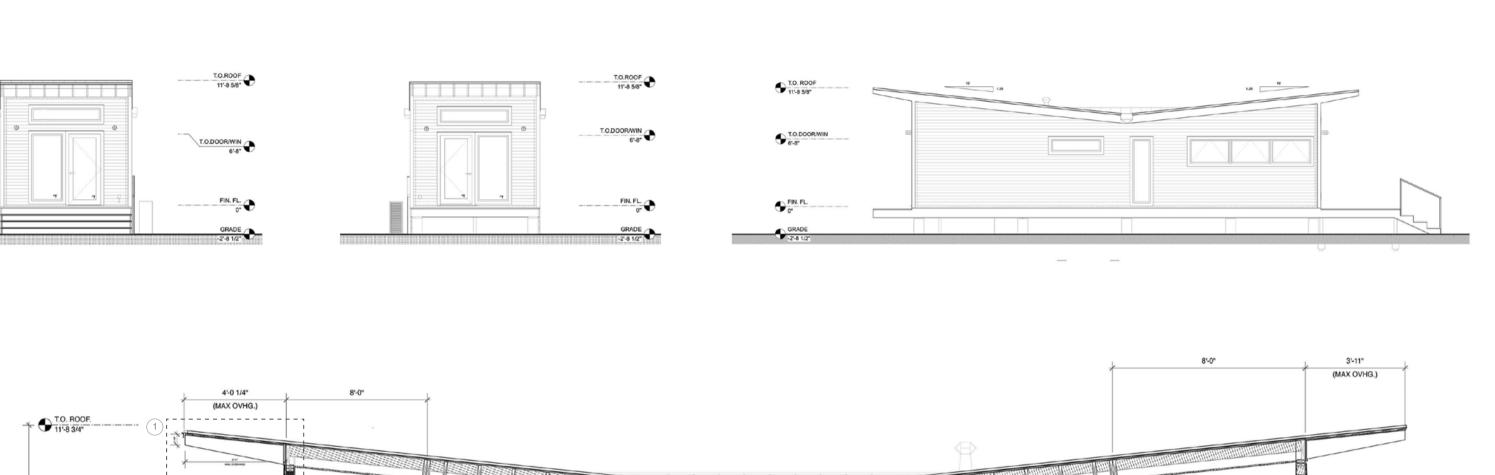
#### zFAB Butterfly

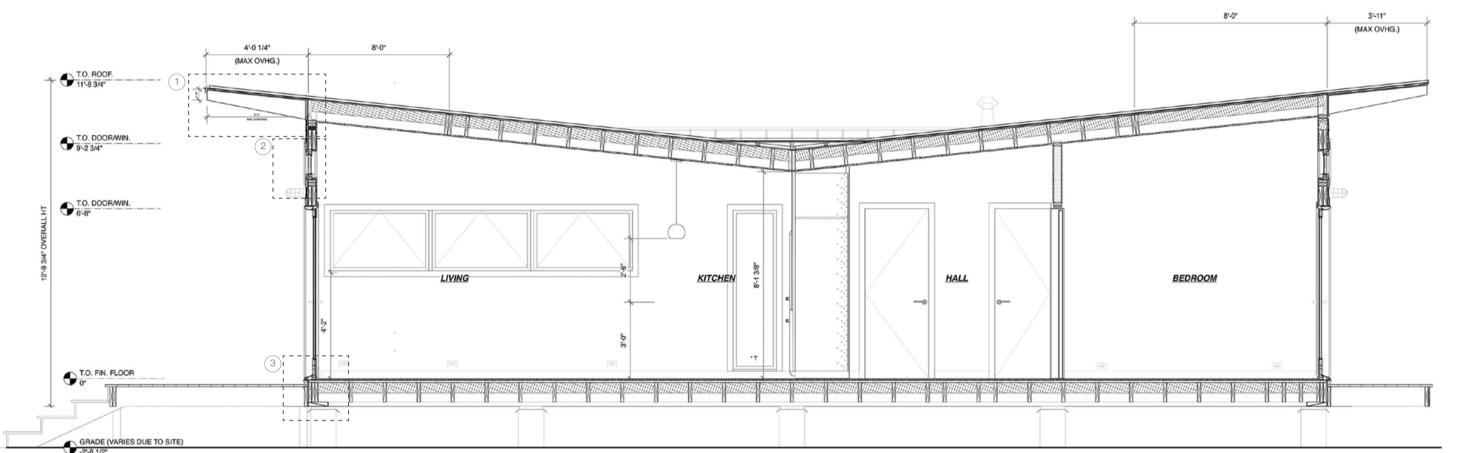
The zFAB Butterfly is a prefabricated butterfly-roof home design offering affordable, efficient living solutions under 800 sq ft. Factory-built and delivered for on-site installation, it reduces cost, waste, and construction time, providing a sustainable housing option.

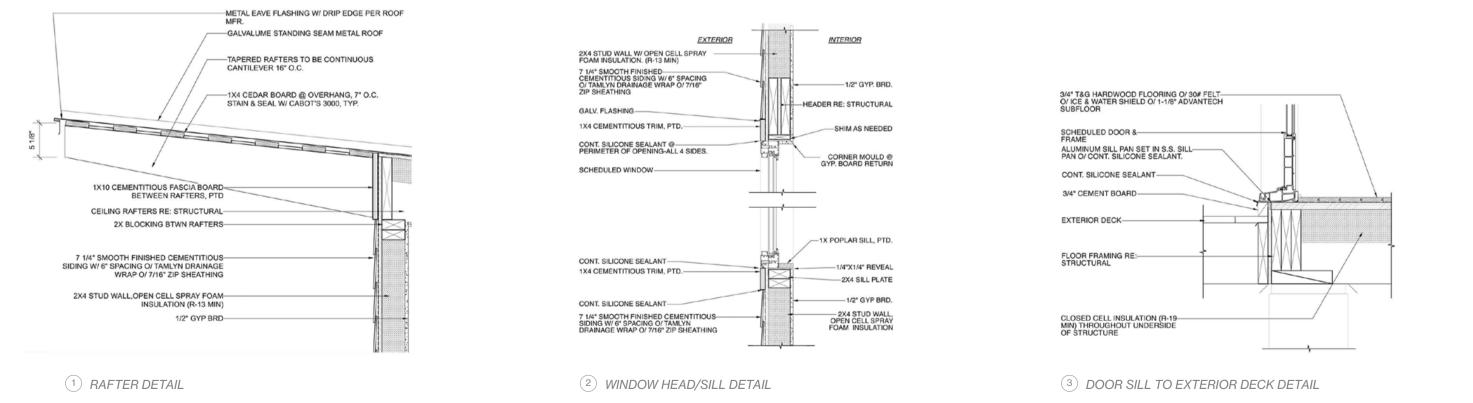
I developed a complete version with a full BIM-modeled drawing set, under supervision, drafting the architectural, structural, and MEP components to ensure efficient fabrication and site installation.

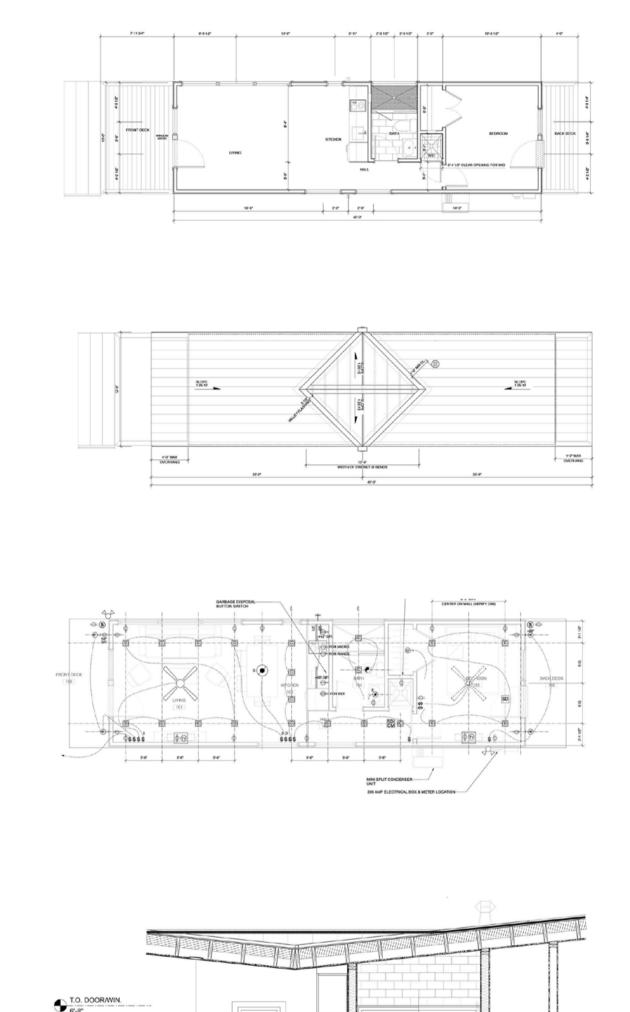


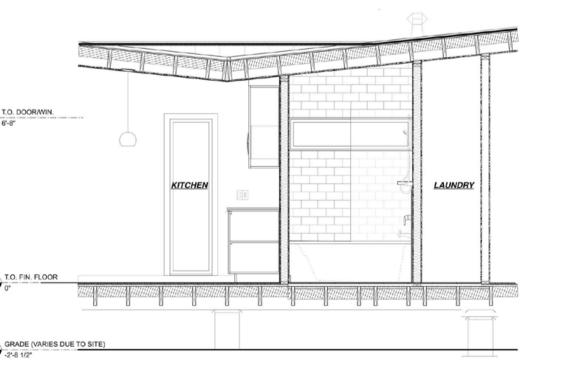
Completed and built images of the zFAB Butterfly, property of Brett Zamore Design.











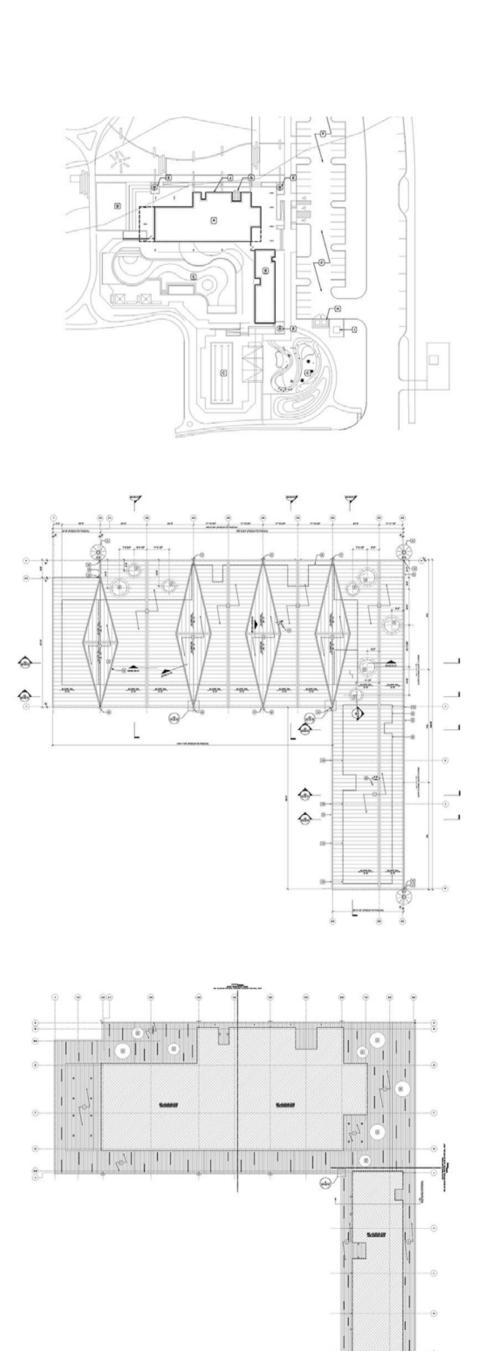
### Bridgeland Creekland Activity Centre

As part of the design team at Brett Zamore Design, I contributed to the development of the *Bridgeland Creekland Activity Centre*, a mixed-use project aimed at enhancing the visitor experience while preserving the natural environment.

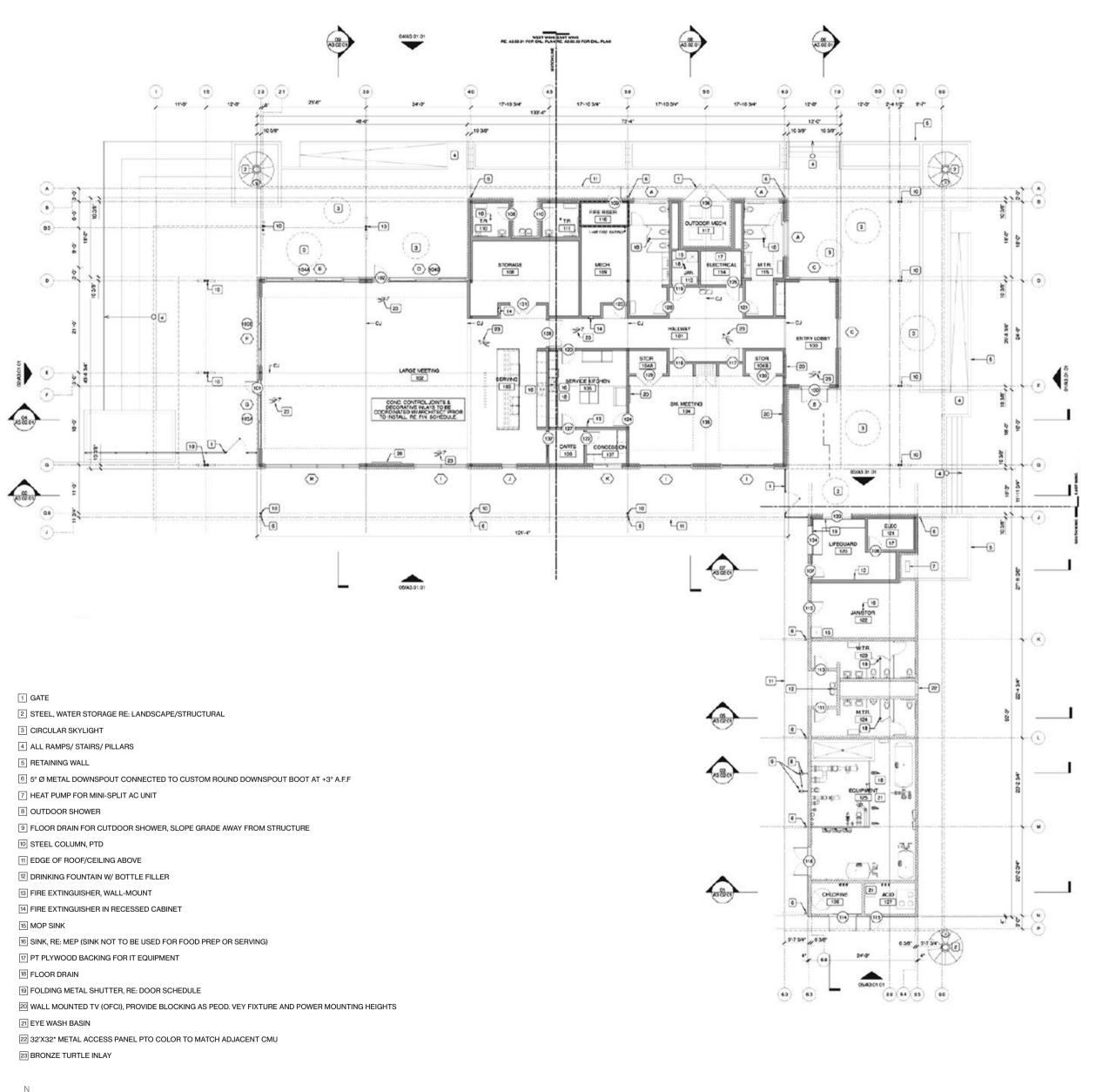
My role included drafting and detailing across various project phases whilst also coordinating material orders and preparing visuals for client meetings.



Rendered visuals for Bridgeland Creekland, produced in collaboration with the Brett Zamore design team



Drafting work including Site Plan Floor, Roof Plan and Roof RCP Plan



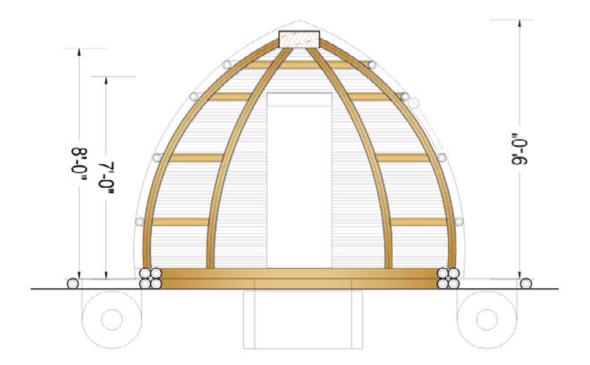
Floor Plan - Overall

### Floating L.O.G Makli, Sindh, Pakistan

OFFICE	Ar. Yasmeen Lari – Heritage Foundation of Pakistan, Makli, Pakistan
YEAR/STATUS	2021/Built
ROLE	Architectural Assistant (RIBA Part 1)

Floating L.O.G (Lari-Octa Green) is a mobile bamboo system designed by architect Yasmeen Lari to adapt to the region's flood conditions in Makli, Sindh, Pakistan.

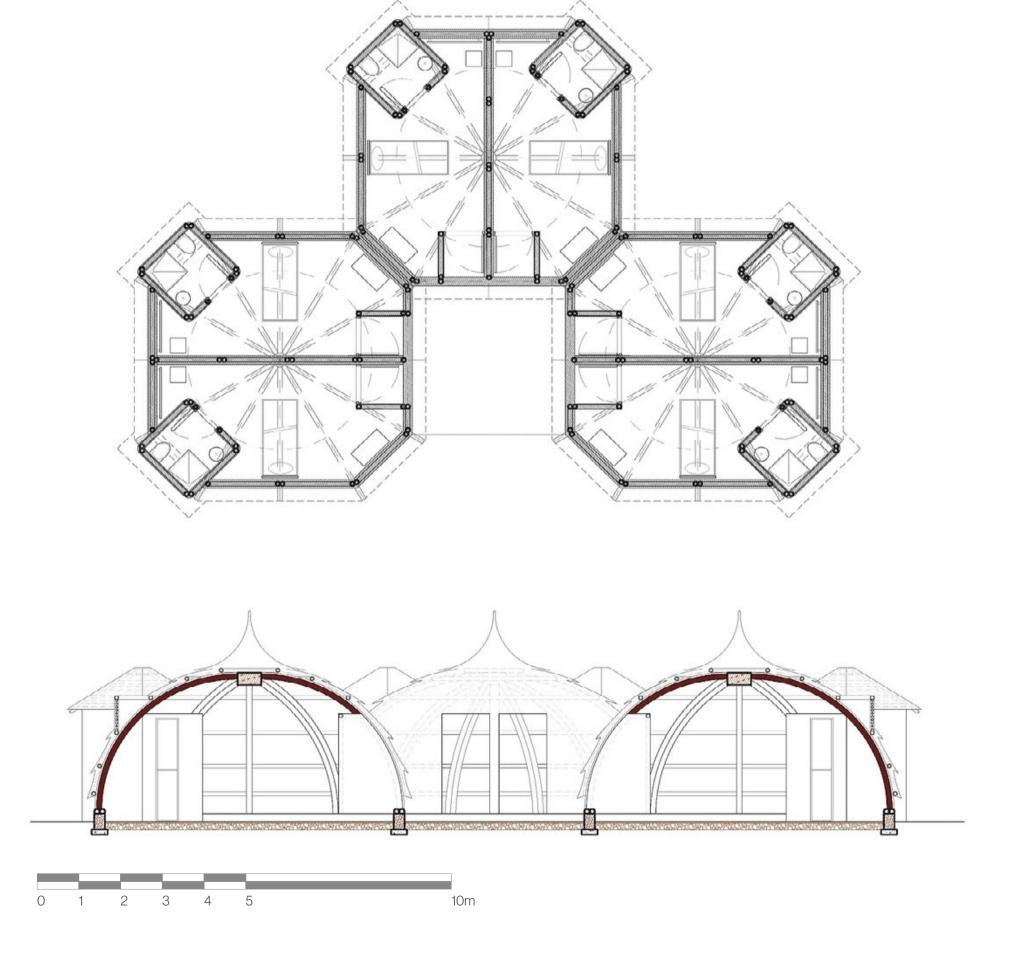
It functioned as a floating quarantine shelter during the COVID-19 emergency, and was then adapted as residential clusters for post-crisis use. The design was constructed in 1–2 days, focusing on efficient and quick fabrication.





#### Role and Responsibilities:

- Designed and drafted technical drawings with design team.
- Co-managed and assisted on-site construction.
- Engaged with local communities to gather feedback on the design's functionality, impact and requested adaptions.



Floating Pod designed as an adaptable typology to create settlements post its initial usage (drawing produced in collaboration with 3 person design team)



Bamboo pod typology constructed at Yasmeen Lari's 'Zero Carbon Centre Design Lab in Makli, Pakistan



Bamboo pod covered with thatch roof to test lightweight roofing system before testing structural buoyancy Bamboo pod clad with a thin layer of earth-lime plaster to provide shelter

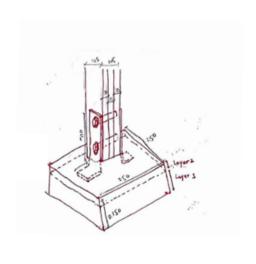


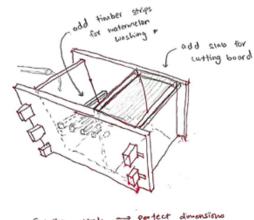
## Watermelon Place Koshirakura, Niigata, Japan

PROJECT	Shin Egashira's Architectural Association Visiting School in Koshirakura, Niigata, Japan
YEAR/STATUS	2023/Built
ROLE	Group Rorkshop Design and Build

Watermelon Place is a design-build project created in the rural village of Koshirakura in Niigata, Japan. As part of the AA's longstanding workshop, the initiative collaborates with the local elderly population of the post-agricultural community, using vernacular materials and techniques to address community needs.

It revitalizes a natural spring once used for washing locally grown watermelons. A reclaimed timber basin is elevated on an in-situ cast concrete pedestal, providing an accessible washing and drinking station. A timber structure was designed to offer shade in summer and protection from heavy snowfall in winter. My role focused on the concrete foundation and footings as well as the timber sink details.



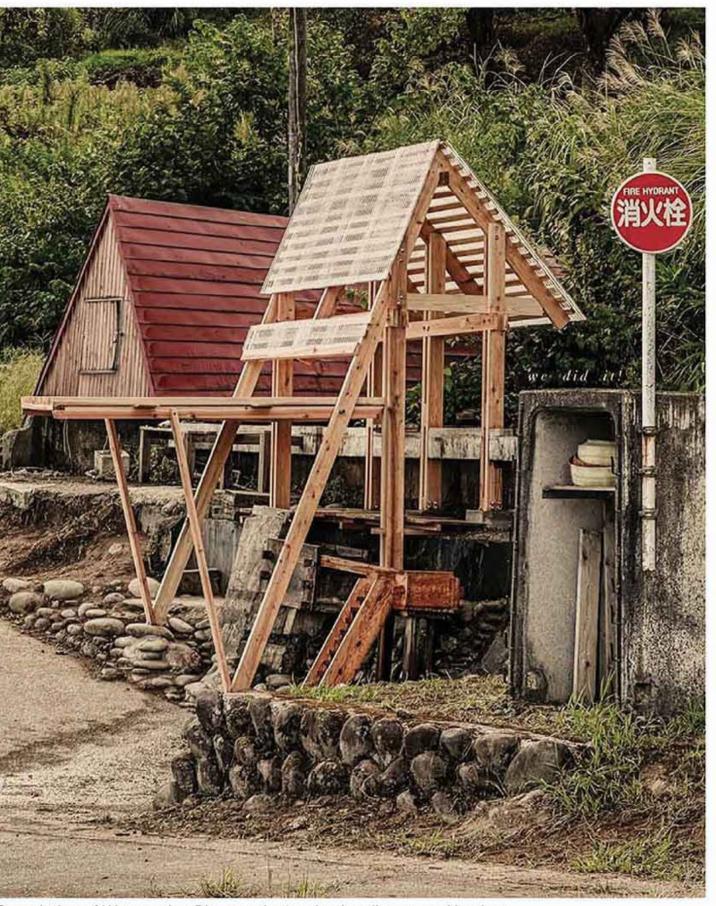


Exacting sink -> pertect dimensions to become sink 2

In-process sketches during the design and build of Watermelon Place



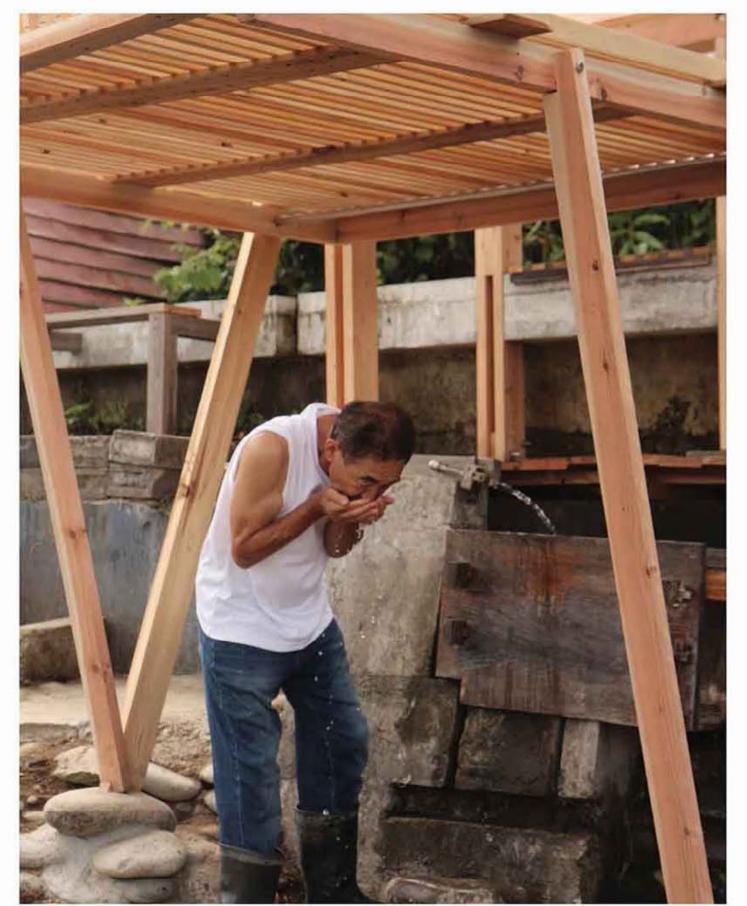
Exposed timber truss roof with a polycarbonate covering for diffused light filtration



Completion of Watermelon Place project, using locally sourced lumber



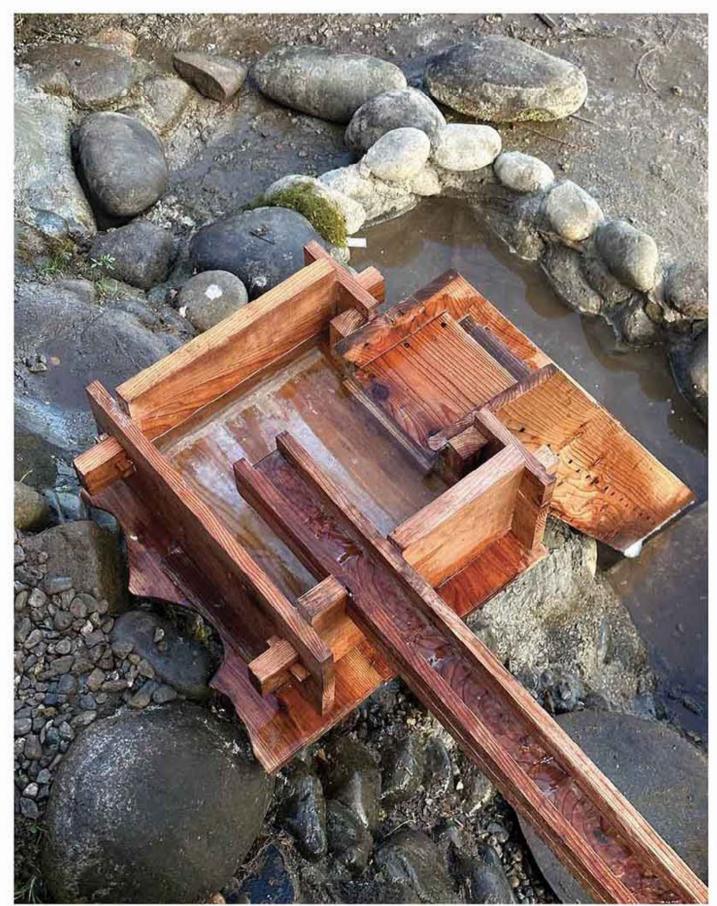
Dry-stacked stone and concrete-stabalised base, supporting timber post



A local villager and friend named Hirosun, enjoying the fresh spring water after repair of water channel upon project completion



Wood and metal water spout system, to provide adjustable pressure of fresh water stream



Water channel directing fresh water from stream into designed concrete-cast pebble basin