

r.l.nitya | architecture
portfolio
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This book is a display of select projects worked through the academic, internship and professional stages of my journey in architecture. The cohesion of vision, narration, form and function may guide through the process of understanding the projects.





#01

contemporary caveman

workshop concept to
experience living in a sculpture

#02

la cour

professional project
exploring the elements

#03

the learning curve

professional project
sculpting out landscape from built

#04

thoonganagaram

academic project
binding the city

#05

urban organ

academic project
creating a sustainable system

#06

lampshade

professional project
challenging the perception of
light

#07

outside in

professional project
creating a world in a shell

#08

distil

professional project
incepting forms from the terrain

#09

artist house

professional project
hugging the woods

#10

the cantilever

professional project
reaching out to the sea

#11

tangent

professional project
revolving around a strong
social core

#12

miscellaneous

glimpses of concepts,
workshop outcomes

#01

contemporary caveman

a retreat within a sculpture

location coorg, india

typology hospitality

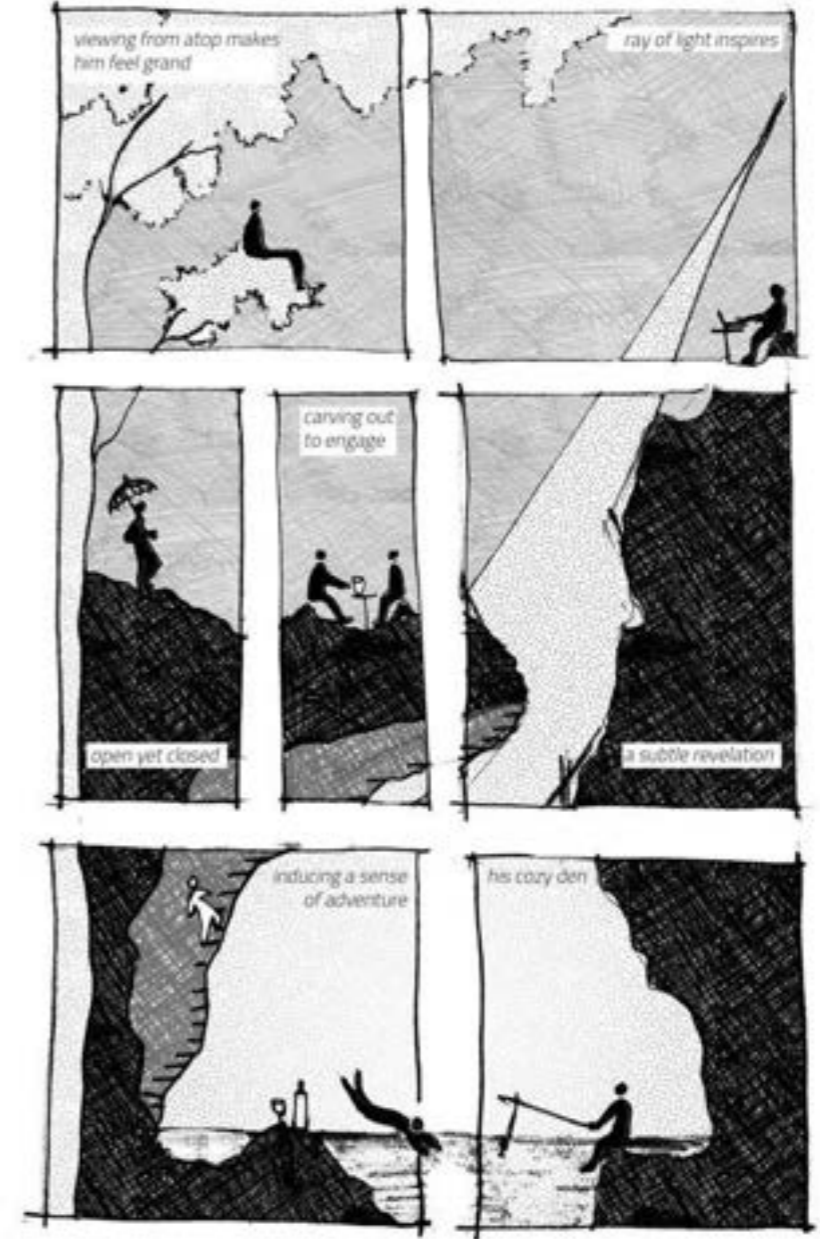
nature of project workshop

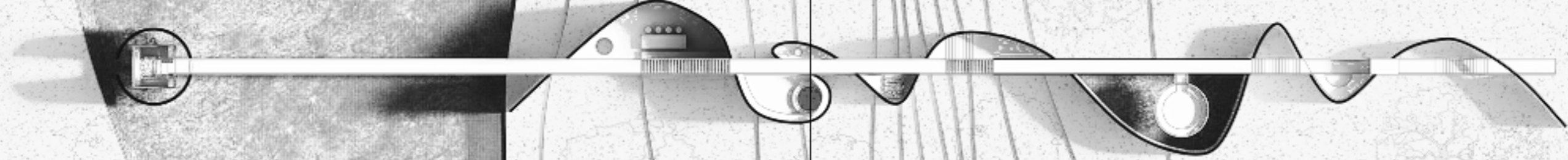
outcome at Evolve studio

role in process concept, design,
presentation

individual/group individual

The vision is to create a den for the contemporary caveman, interweaving landscape and waterscape with the built form flowing through organically. The intangibles of his lifestyle preferences will carve out a space for him - a diffused yet defined boundary.





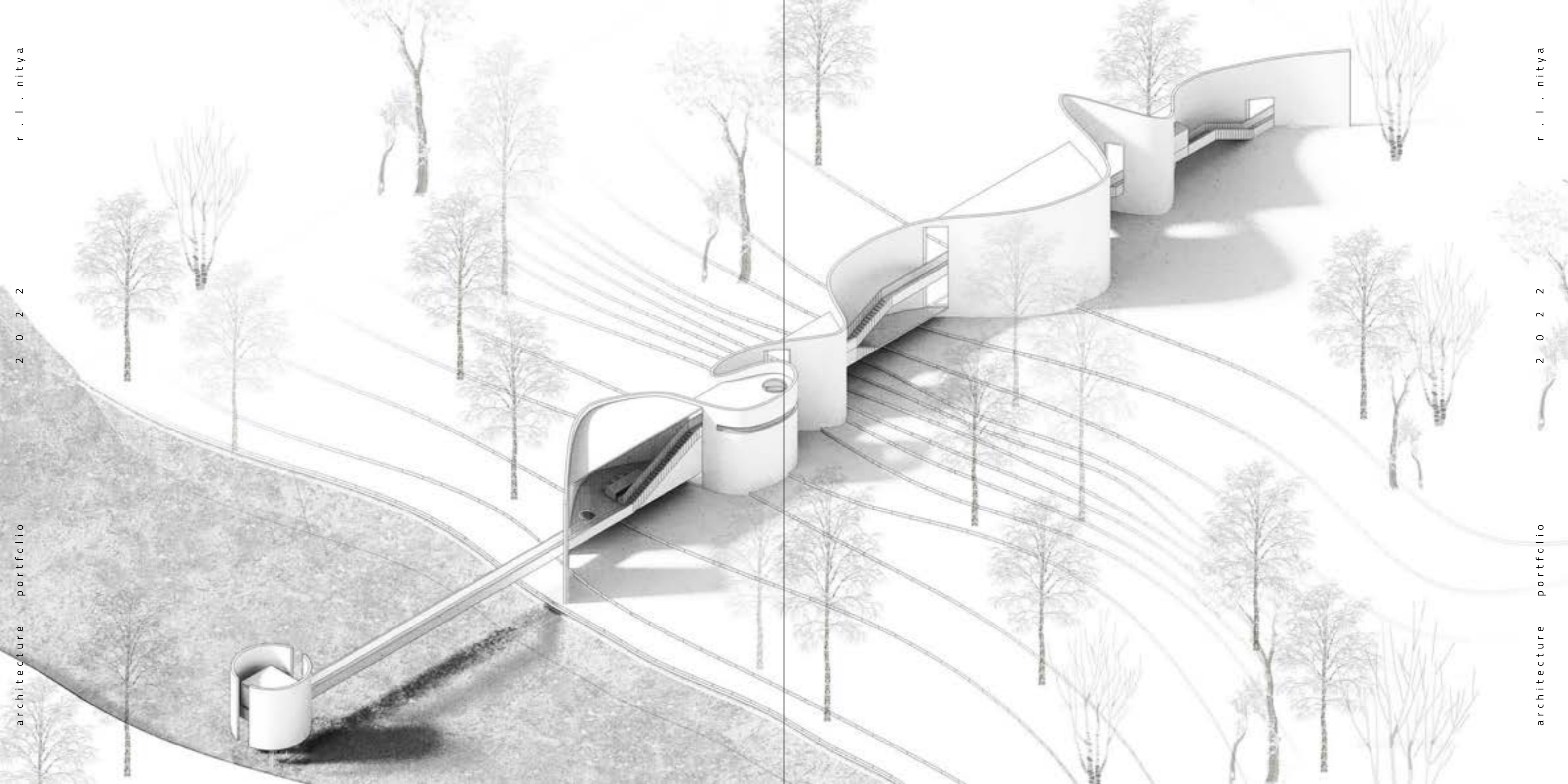
there is no space without a boundary

volume defining light
form itself paving way for a blade of light to penetrate into the space,
the light itself becoming the roof over our head
exaggerated proportioning
movement through spaces of wide to slender volumes



through the stroke
The vision to blur the lines between landscape and waterscape
translates onto forms that organically penetrate in to the setting







#02

la cour

an artist retreat exploring the elements

location auroville, india

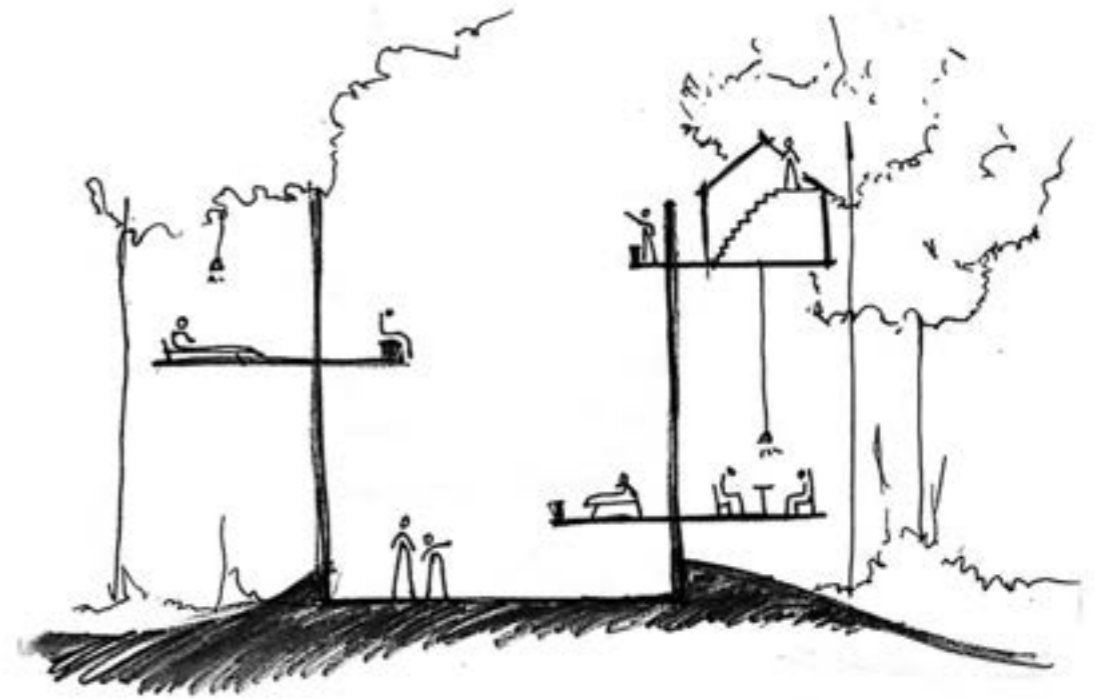
typology hospitality

nature of project professional project at Evolve studio

role in process design, drawing, presentation

individual/group group

The vision was to create a space for artists to express themselves through self-exploration. Establishing connect with the elements of nature such as light, sky, vegetation, earth and water will allow one to contemplate using architecture to frame these different experiences.





light

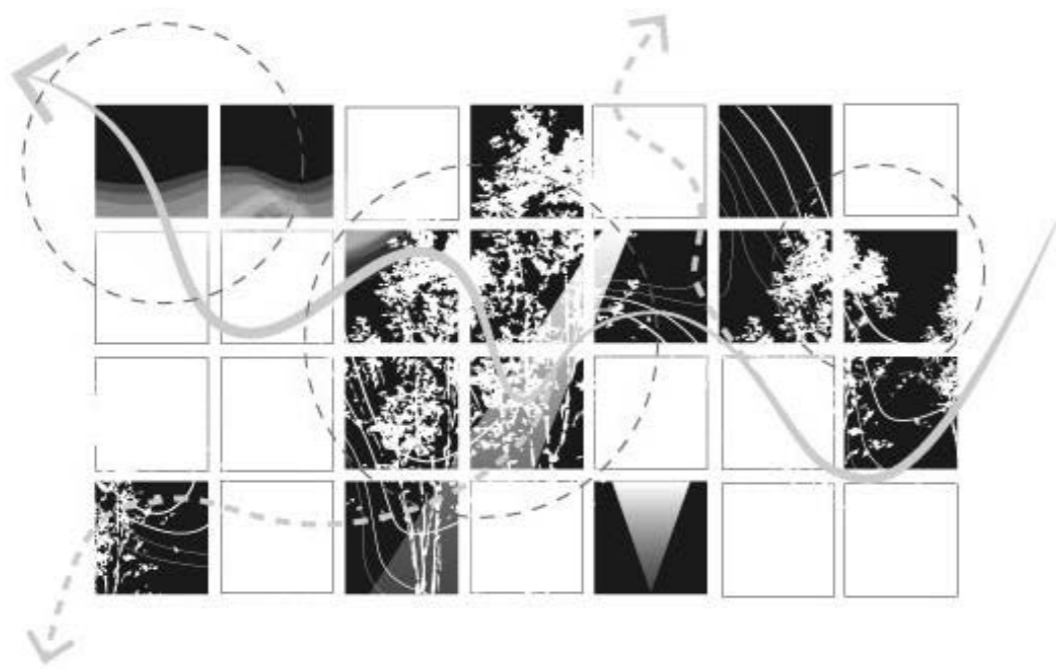
sky

vegetation

earth

water

establishing connect with elements of nature



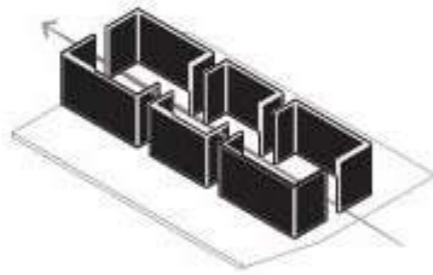
plotting experiences through different interactions of elements

The vision was to create a space for artists to express themselves through self-exploration. Establishing connect with the elements of nature such as light, sky, vegetation, earth and water will allow one to contemplate using architecture to frame these different experiences.





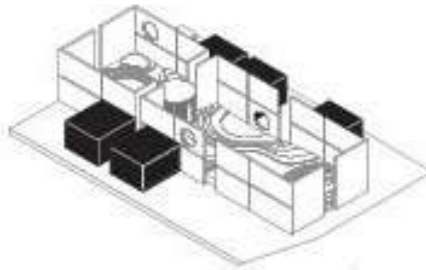
i axis



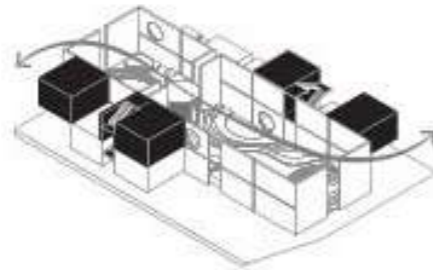
ii courtyard



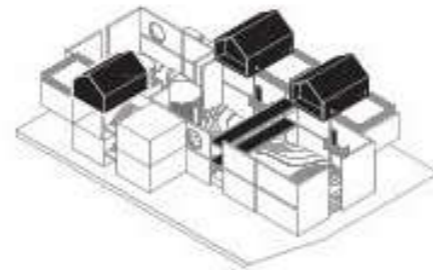
iii landscape



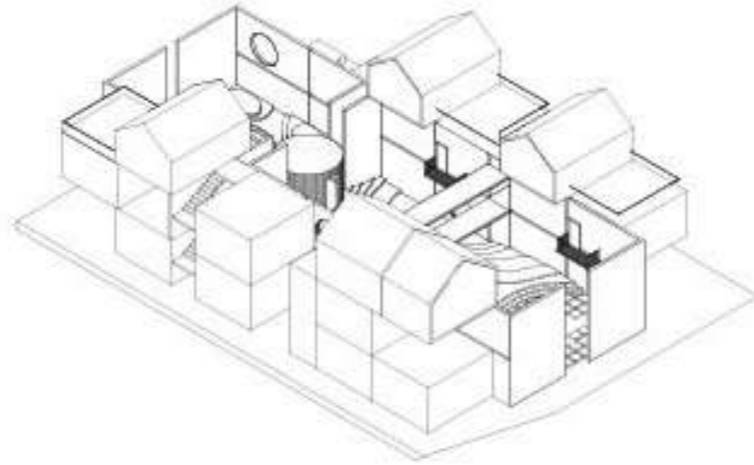
iv rooms



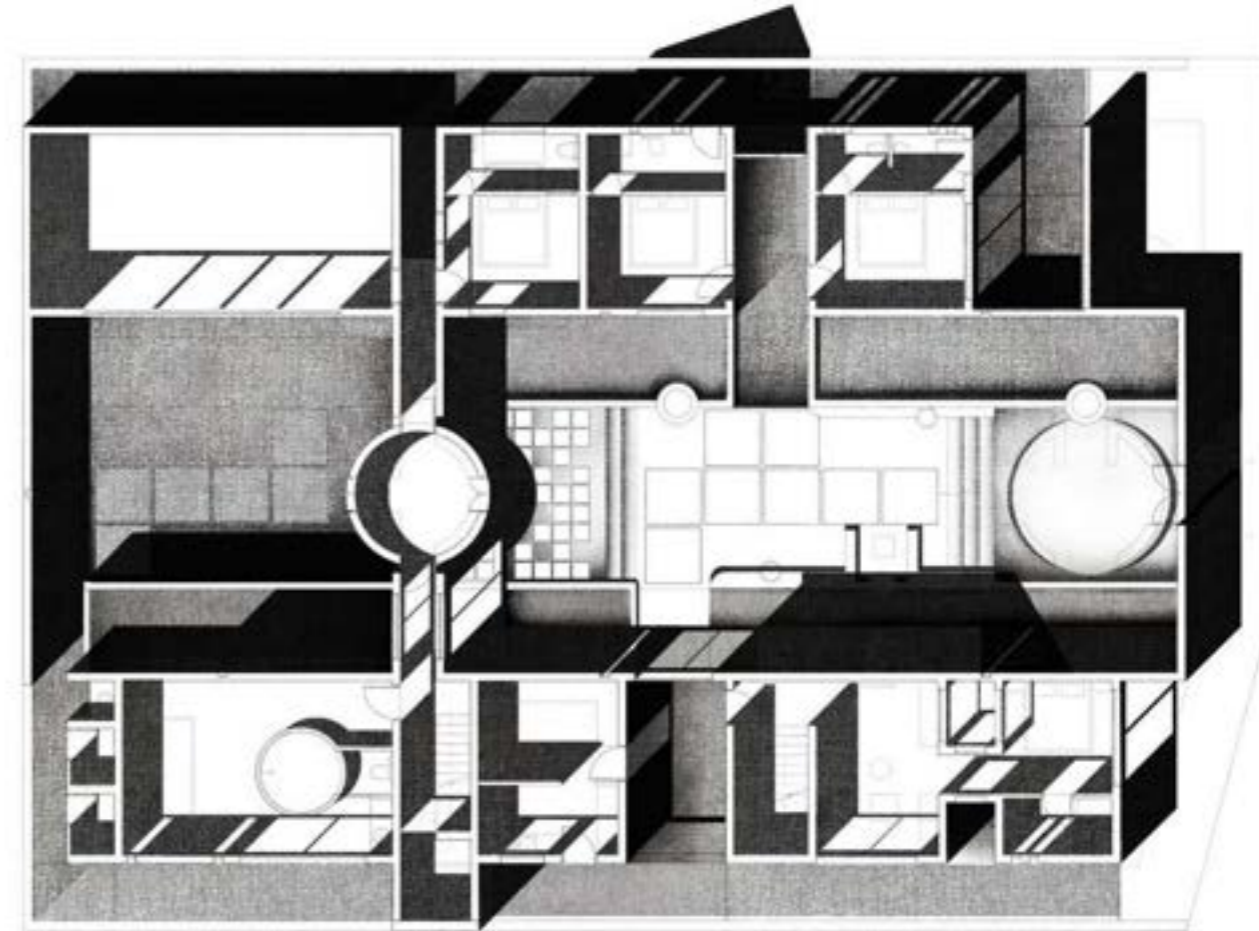
v rooms



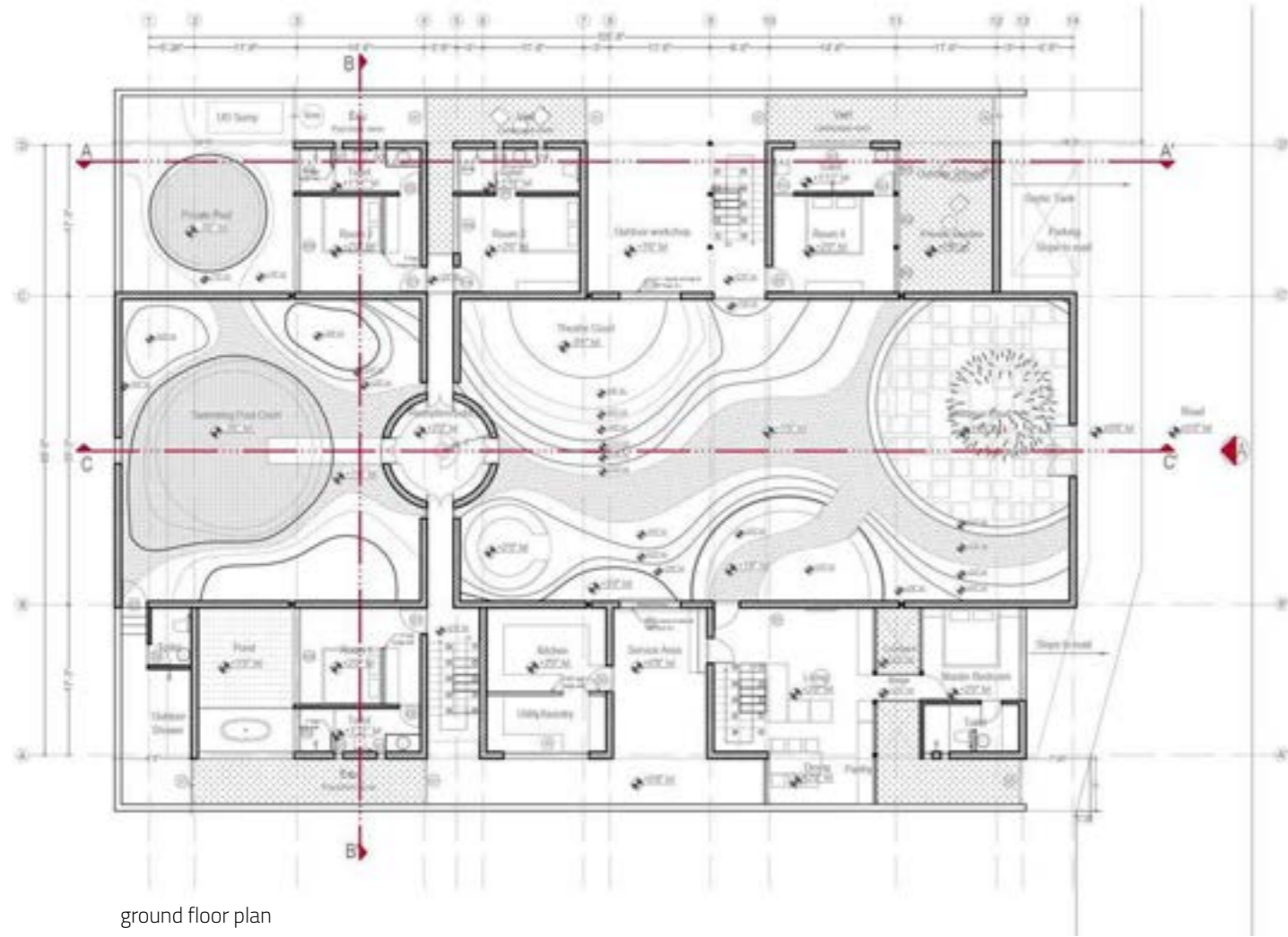
vi bridge



The form aims to create spaces for both isolation as well as congregation. With a strong linear axis, three courtyards frame up the congregation. On either sides of the courts are rooms which allow one to isolate. The rooms subtly interact with the central courts - step out balconies and circular openings allowing light to bind the inside and outside, while retaining the privacy required for an artist's retreat.

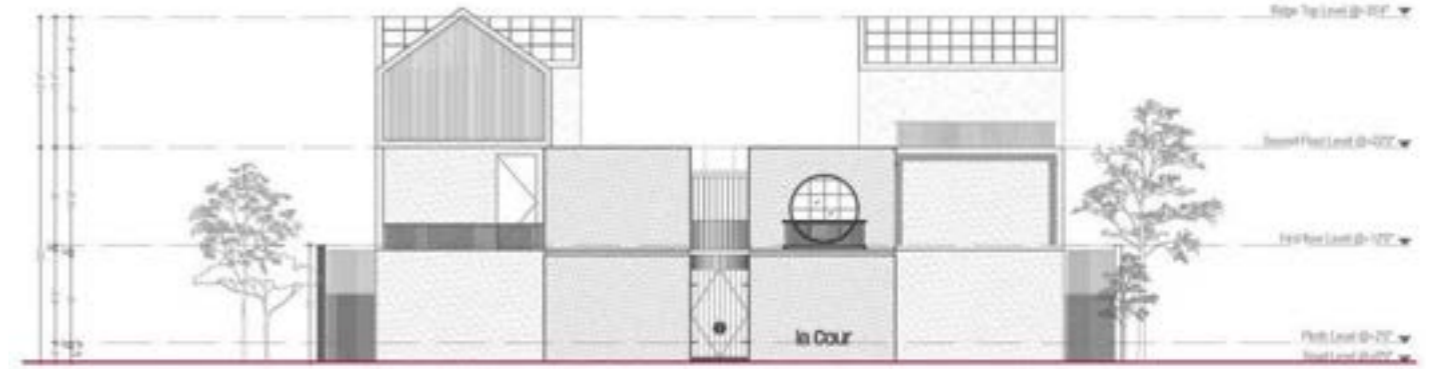


La cour (The courtyard in French) - The central spine is divided into courts, the entrance court which is more public, the performance court which is a space for the artists to culminate and celebrate. The rooms plug into this main courtyard each interacting differently with the elements of nature. The nature of openings define the character of each of these rooms creating different experiences.



ground floor plan

The project is currently being executed at Auroville with locally processed CSEB blocks, made with soil available on site. The structure is load bearing designed along a minimal geometric yet structural grid. It is planned out for phase wise construction in 3 stages. Steel detailing with wooden architectural volumes articulate the form.



front elevation



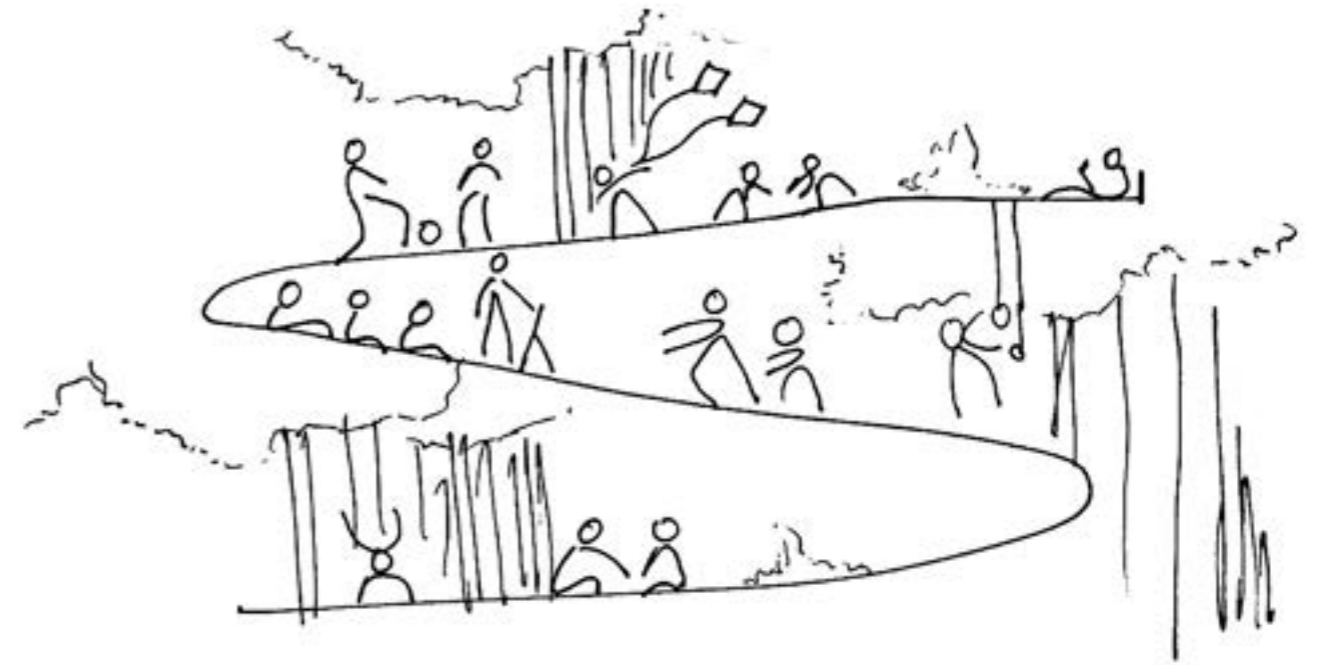
section cc'

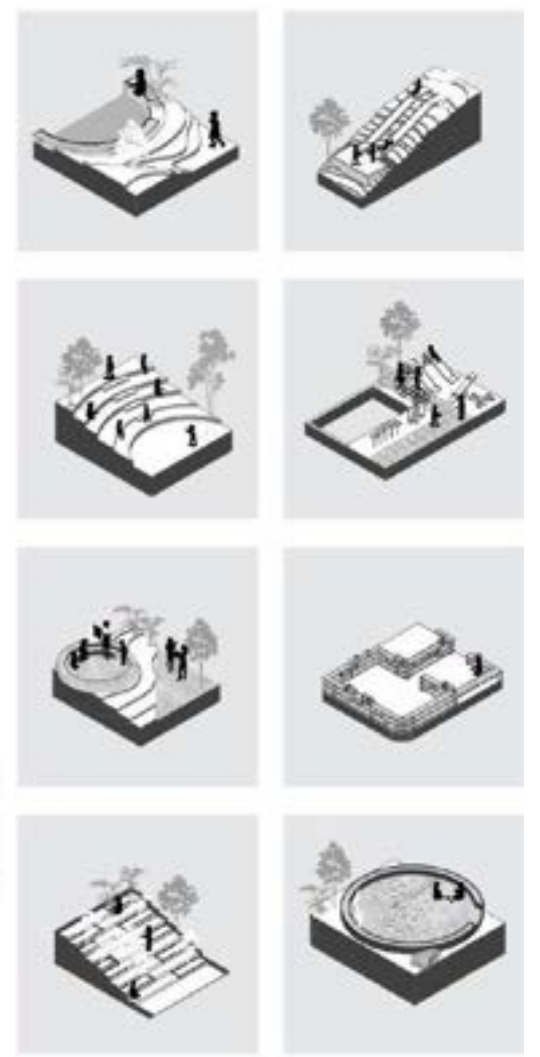


#03

the learning curve*a school sculpting landscape from the built***location** chennai, india**typology** institutional**nature of project** professional project at Evolve studio**role in process** design, drawing, presentation**individual/group** group

The intent was to sculpt a memorable journey for the kids through the built mass in a dense threshold. An organic contour spine allows the kids to experience the joy akin to trekking through a mountain within the built environment. It induces a radical explorative learning culture through experience.





An adventurous exploration of levels, celebrating the collective through large gatherings, a fun filled experience in water and flexible spaces to explore contribute to the spine inspiring the students to experience the vertical landscape. The vision insists on a collaborative space which is seen through the materiality of the project. Every material used in the building has a unique character and texture which allows the kids to experience the space through all senses.



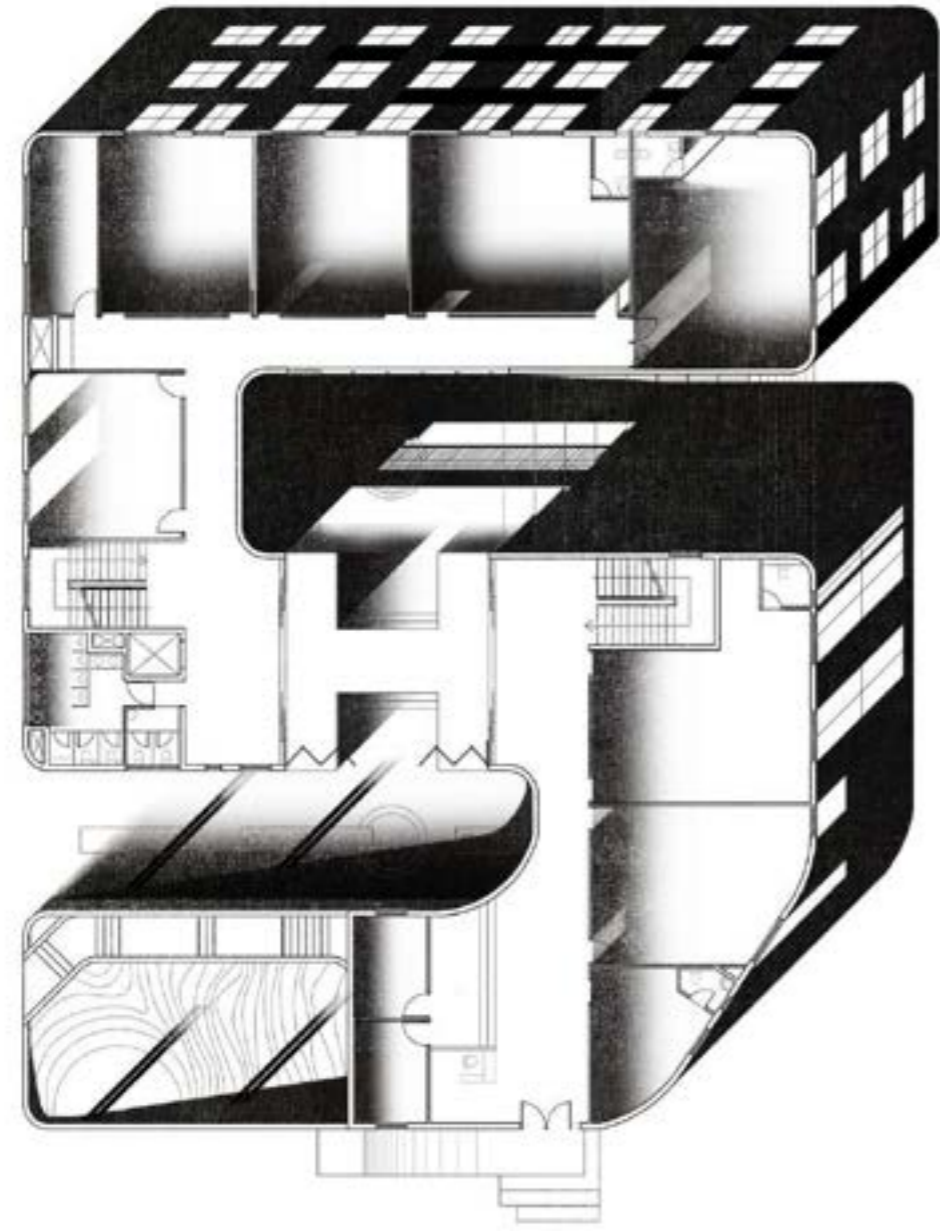
the organic spine completing the first phase of the project



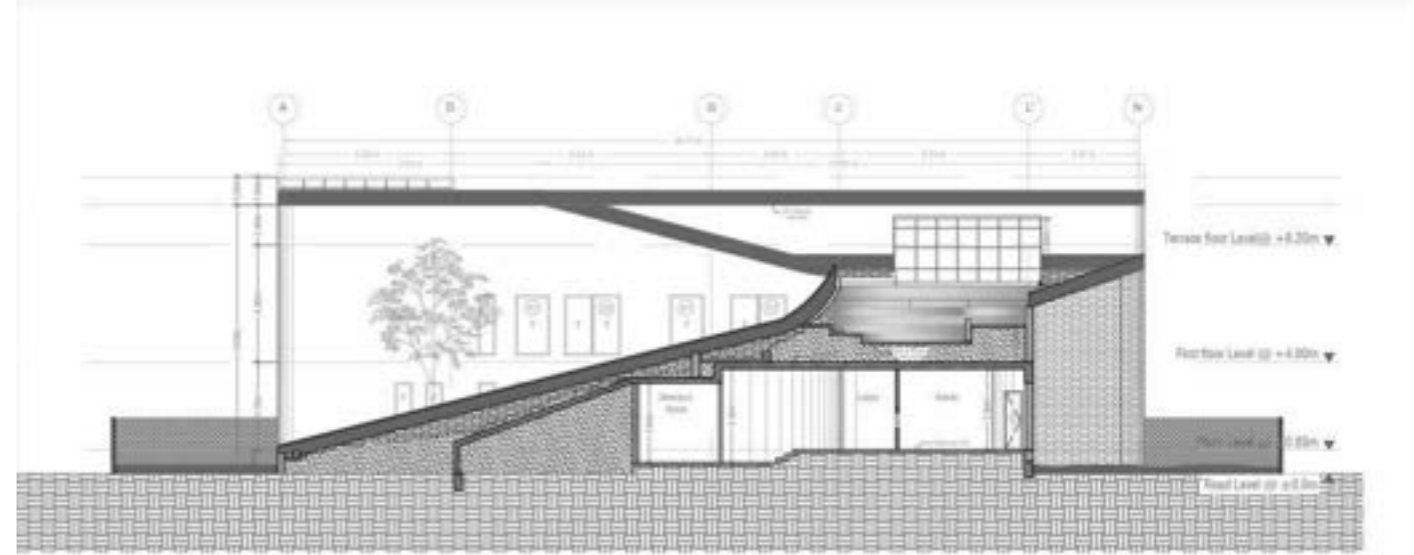
the second phase floating above the shaded playscape



the destination of the learning curve as the futsal zone



The built footprint follows the journey and creates a linear built form flowing through the spine. Therefore, the form opens out to the immediate surrounding for light and ventilation. The vertical contour carved out of the built mass also brings in ample light and ventilation for every space on all sides. The immediate surrounding facing the road-side demarcates the service usage and the private corridor by the south creates a linear play environment which directly opens out to the primary classrooms.



section cc'



front elevation



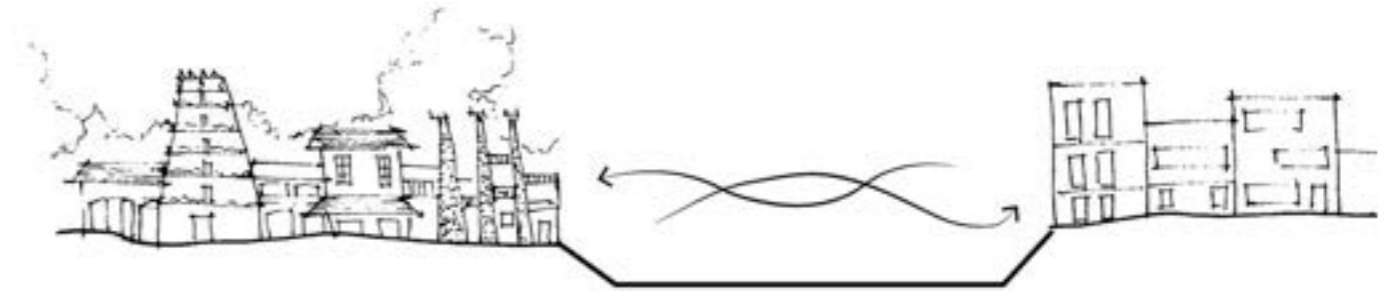
architecture portfolio 2022

architecture portfolio 2022

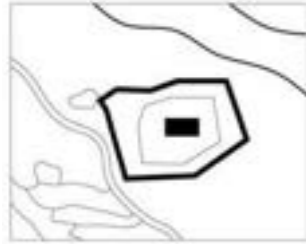
#04

thoonganagaram*academic project bridging the city***location** madurai, india**typology** urban infrastructure**nature of project** academic**role in process** design,
presentation**individual/group** group

'Thoonganagaram' was once the way Madurai was referred to. Today, it means nothing, contrary to what a growing Tier-II city should feel like. The proposed bridge aims to transform Madurai by bringing together people, different cultures and revive invaluable dying arts of the city. An active congregational space open 24 hours to connect the Old city with the New.



Temple town to city



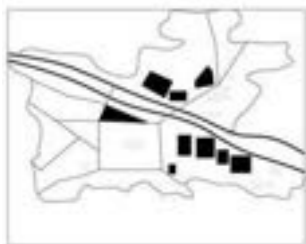
Temple at the centre - fortified settlement inside concentric square planning



Inner city becoming dense



Scattered settlements outside the fort wall



Wall broken - bridges and lines laid

Urban concerns of Madurai city

Cultural disconnect

A strong line of cultural disconnect is felt in Madurai city, one which lacks identity, struggling to face the future or cherish the past.

Lack of secular congregational space

Madurai severely lacks places of assembly for public gatherings, social activities, and public meetings. The Meenakshi Amman temple once served as a congregational space, but is not a secular space in today's context of mixed demographics.

Walkability

Broken pedestrian pathways, and with obstructions, have resulted in pedestrians using the carriageway for walking. Vehicles also face obstructions at unexpected intervals which result in accidents due to collisions.

Market Usability

The market area is cluttered with people, animals, vegetable wastes along with further garbage dumped over them, motorised vehicles inclusive of buses in the narrow lane and non-motorised vehicles which come there to load and unload in front of shops.

Encroachment of street vendors

Lack of designated space for street vendor have resulted in encroachments in the carriageway, disruption traffic flow. Vendor activities add character to streets and act as 'eyes' for the street.

NMTs uncategorised in carriageway

Lack of lane system result in accidents. Non-motorised vehicles are plenty, traveling at lower speeds. Loading carts especially move at around 5km/h which results in collisions due to speed.

Present condition



Dense figure-ground providing no opportunity to carve out a public space

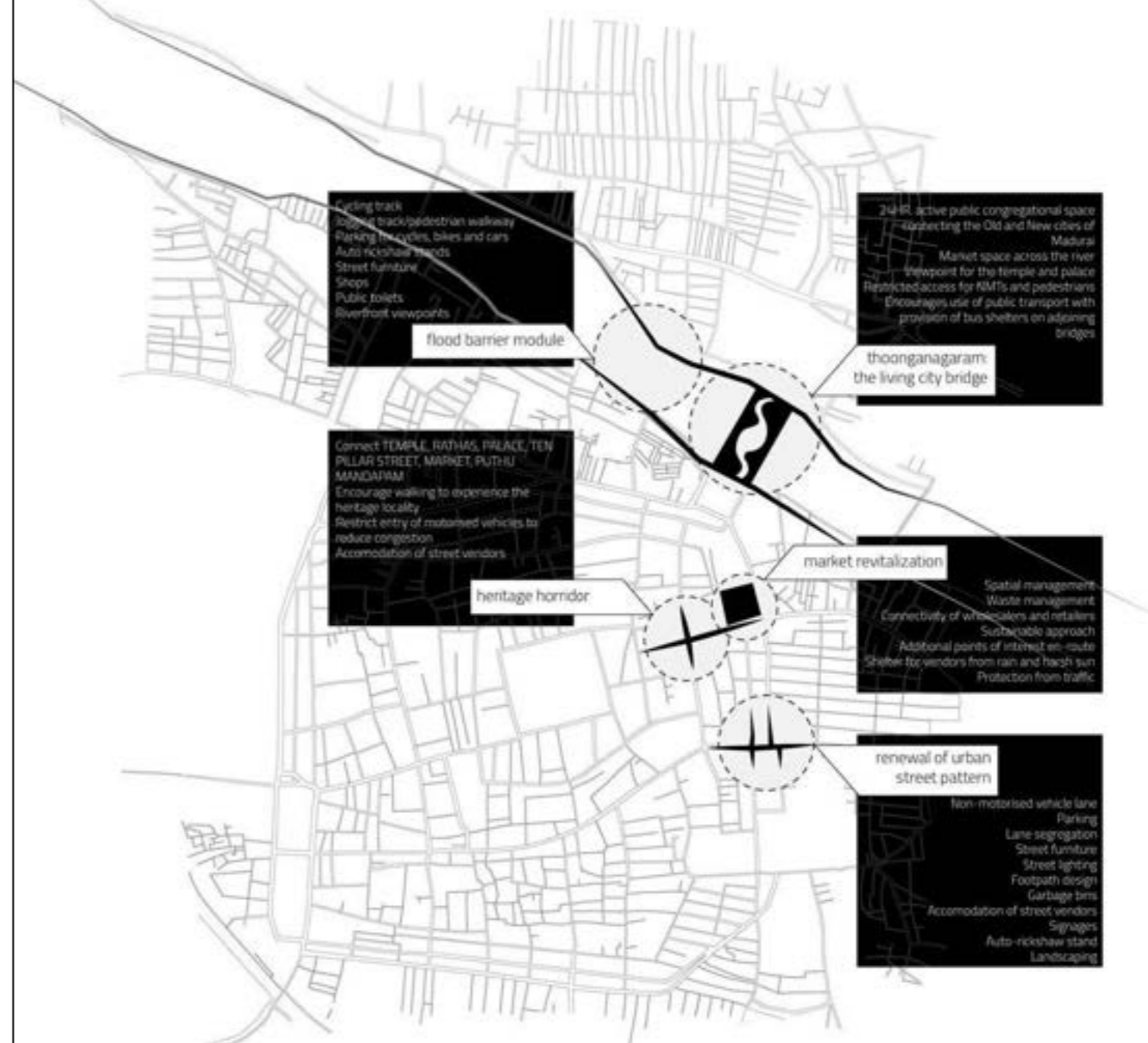


Sparse vegetation, city lacks breathing spaces



Traffic congestion along primary and secondary roads, bikes encroach pedestrian pathways

Proposals



Cycling track
 jogging track/pedestrian walkway
 Parking for cycles, bikes and cars
 Auto rickshaw stands
 Street furniture
 Shops
 Public toilets
 Riverfront viewpoints

flood barrier module

Connect TEMPLE, RATHAS, PALACE, TEN PILLAR STREET, MARKET, PUTHU MANDAPAM
 Encourage walking to experience the heritage locality
 Restrict entry of motorised vehicles to reduce congestion
 Accomodation of street vendors

heritage corridor

24-HR active public congregational space
 -harboring the Old and New cities of Madurai
 Market space across the river
 Viewpoint for the temple and palace
 Restricted access for NMTs and pedestrians
 Encourages use of public transport with provision of bus shelters on adjoining bridges

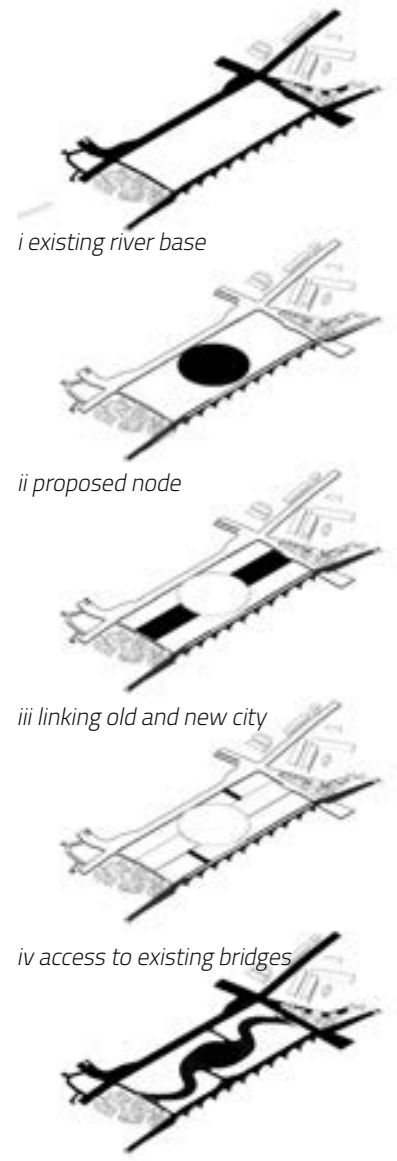
thoonganagaram: the living city bridge

market revitalization
 Spatial management
 Waste management
 Connectivity of wholesalers and retailers
 Subtable approach
 Additional points of interest en-route
 Shelter for vendors from rain and harsh sun
 Protection from traffic

renewal of urban street pattern

non-motorised vehicle lane
 Parking
 Lane segregation
 Street furniture
 Street lighting
 Footpath design
 Garbage bins
 Accomodation of street vendors
 Signages
 Auto-rickshaw stand
 Landscaping

Culturally stitching the city on either sides of river Vaigai



i existing river base

ii proposed node

iii linking old and new city

iv access to existing bridges

v the living city bridge proposed

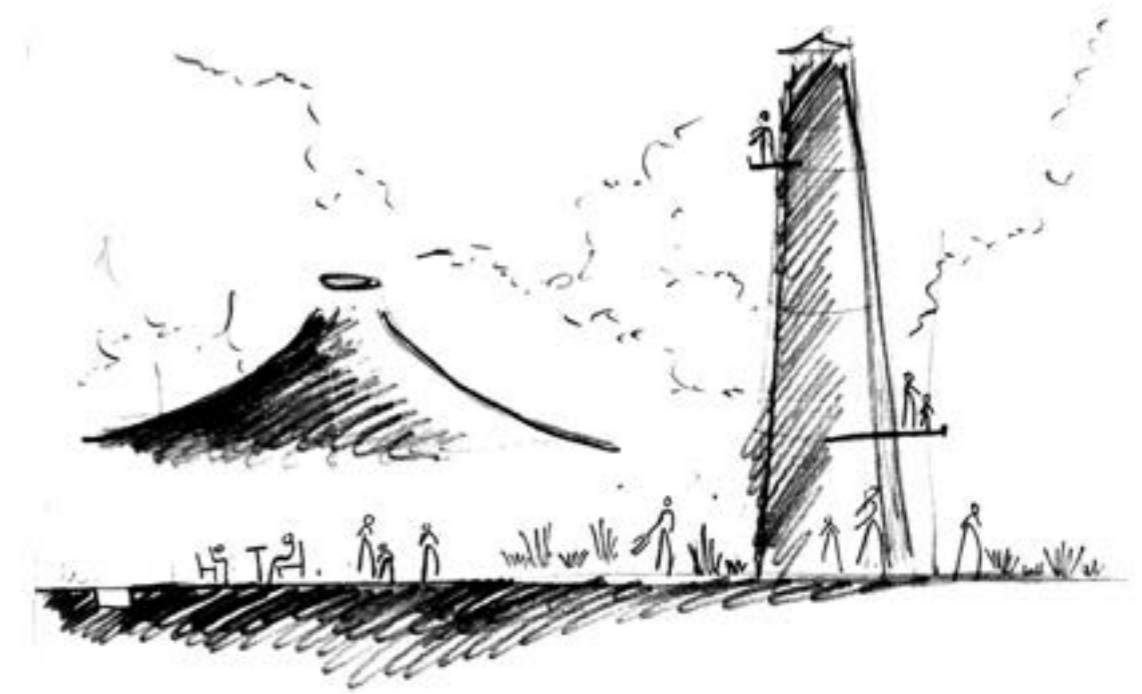


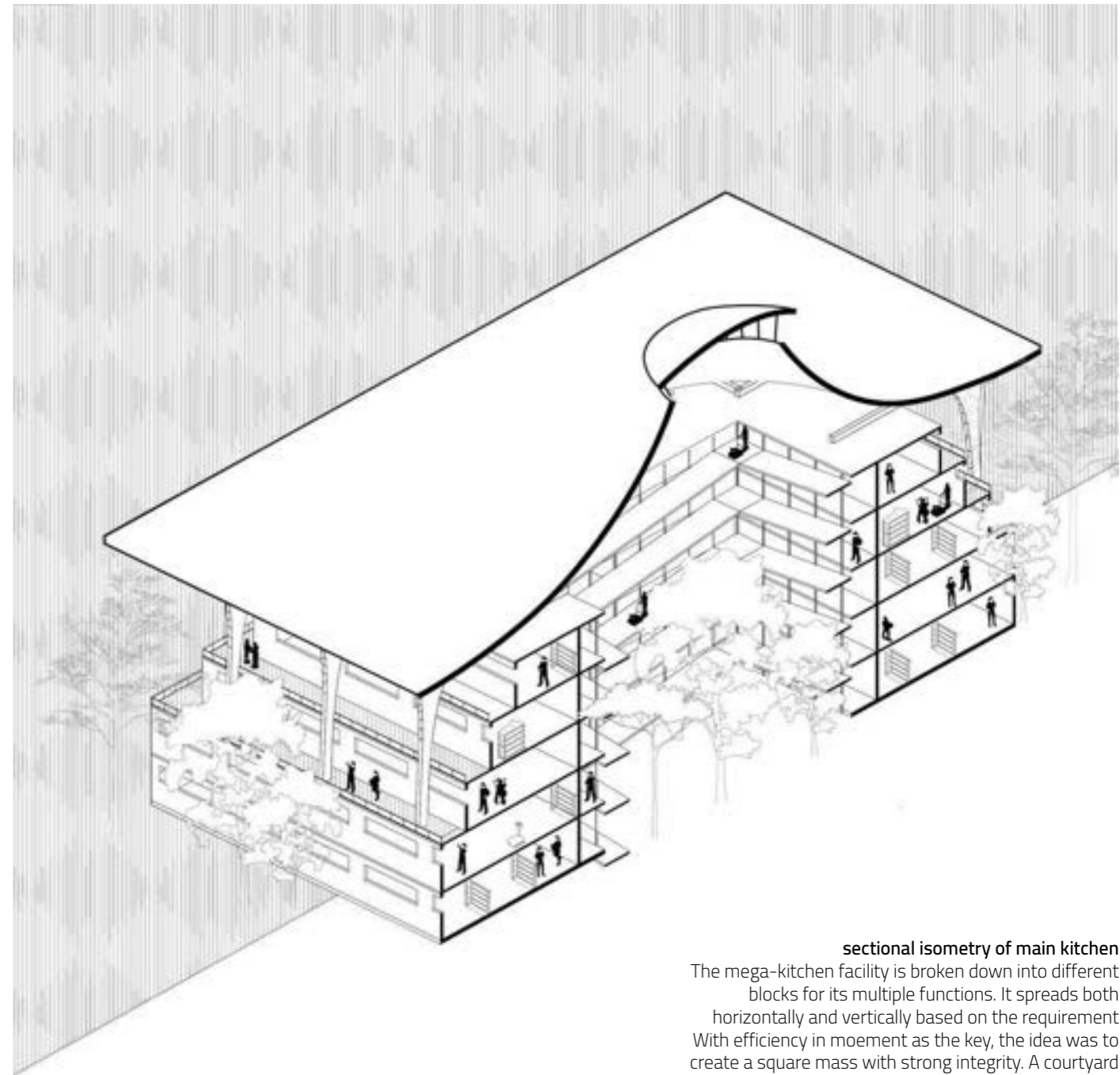
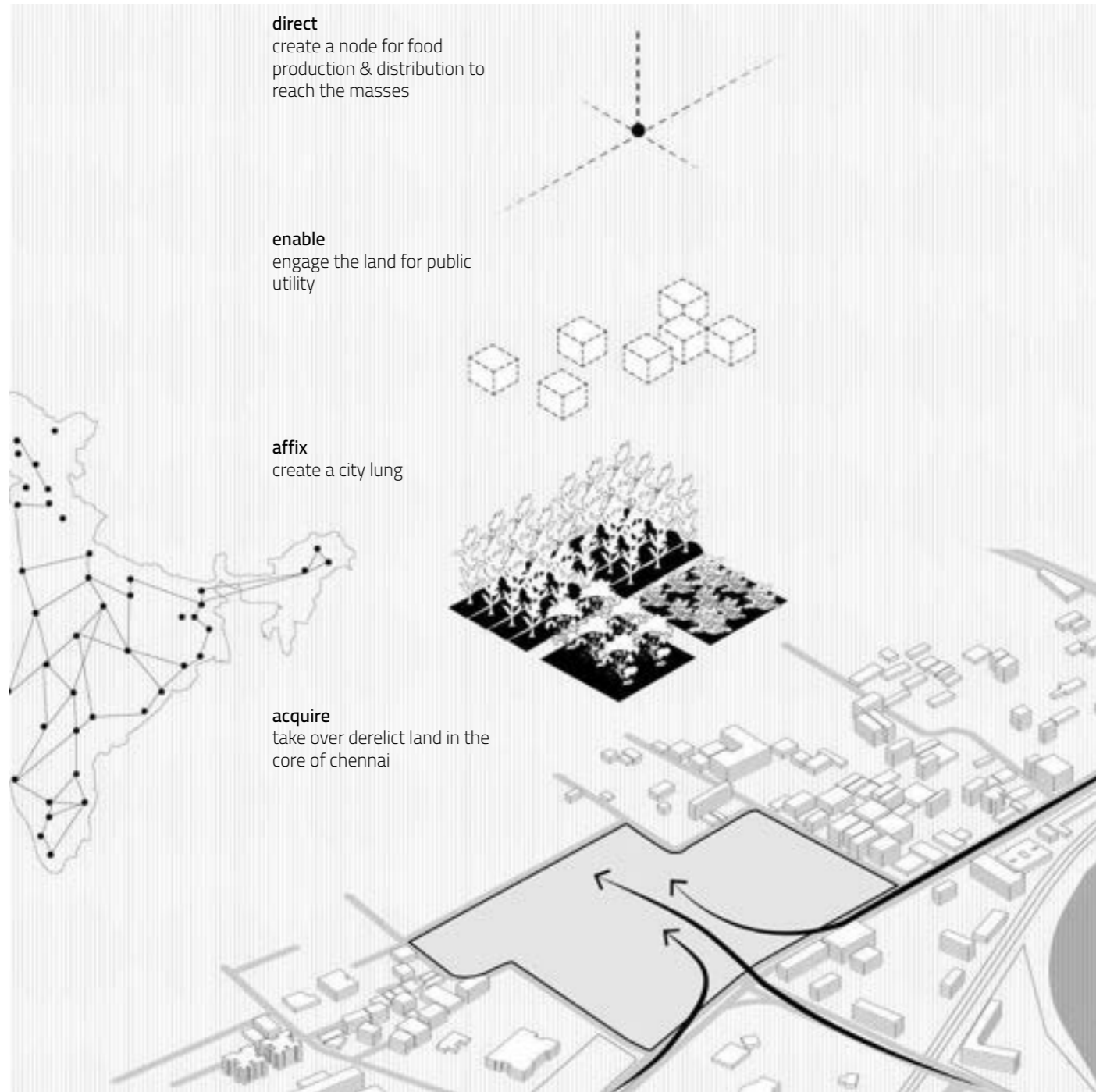


#05

urban organ*urban node concept through food and architecture***location** chennai, india**typology** institutional**nature of project** academic project**role in process** design, drawing, presentation**individual/group** individual

The vision was to create a system of tackling the despairing hunger situation in India through architecture and its integral elements - urbanism, landscape and the built environment. It would aim to work as a plugin to major cities by utilizing government-owned vacant lands - to create food nodes.





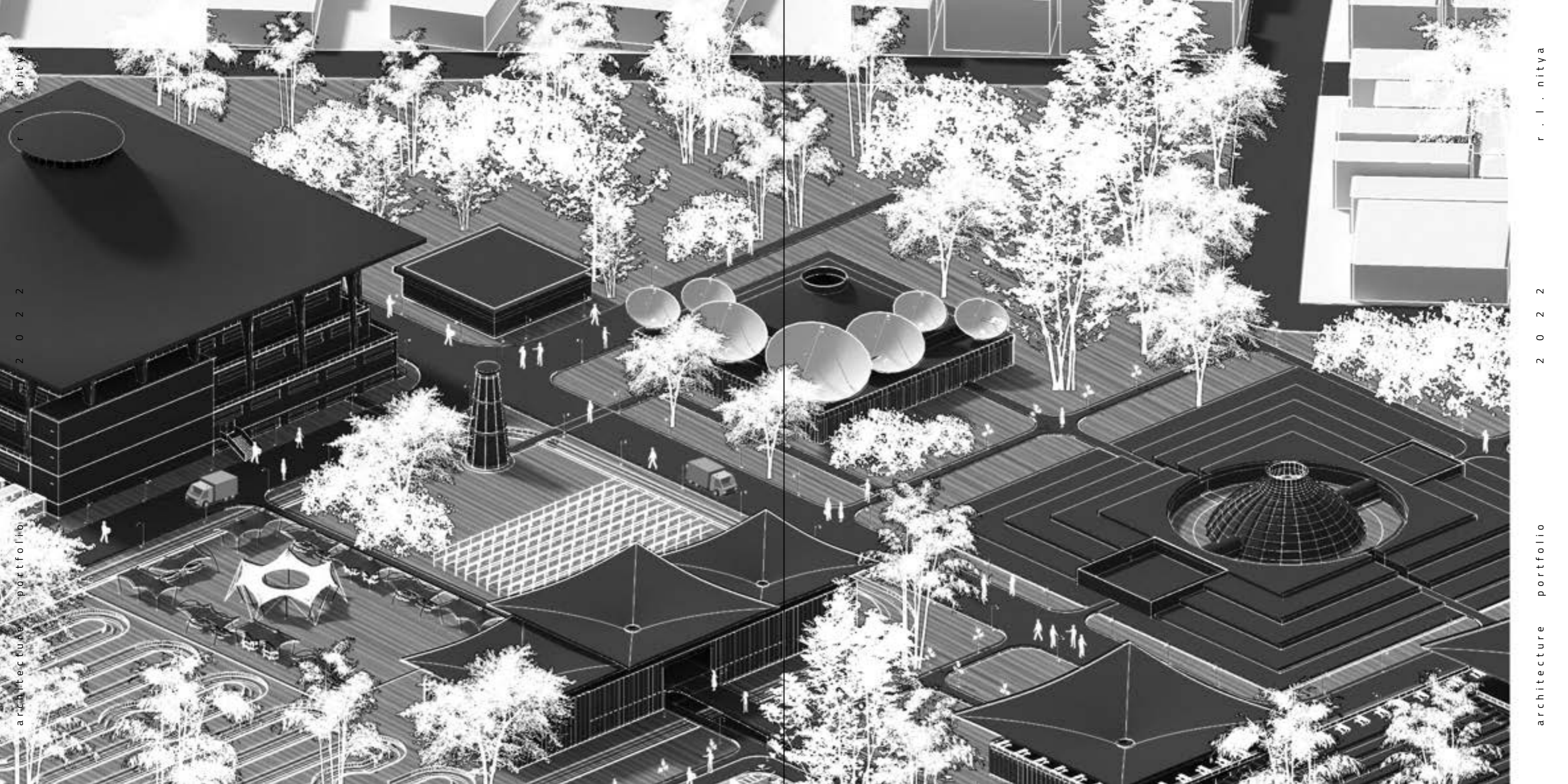
sectional isometry of main kitchen
The mega-kitchen facility is broken down into different blocks for its multiple functions. It spreads both horizontally and vertically based on the requirement. With efficiency in moment as the key, the idea was to create a square mass with strong integrity. A courtyard is carved out to ease the work environment.

The site functions are rotated by 45 degrees to minimize heat gain in the facility. The system works as an organ for the city as an organ performs in the human body - by integrating functions of society, architecture and landscape. This would define a new kind of a public space - one that brings together people for food as the cause. The landscape, built mass, technology with people fueling it, work together as a machine.

- B+G+3
Main Kitchen
- Drying racks for spices
- Exhibition stall area
- Root Zone Treatment
- G+2
Surveillance
Admin
General areas
- 4-Wheeler Parking
154 nos.
- 2-Wheeler Parking
120 nos.



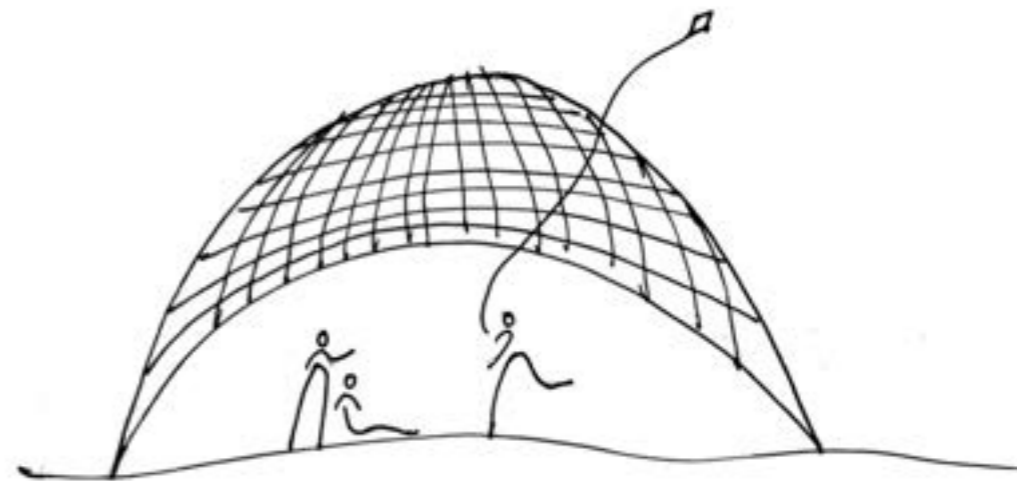
- B+G
Steam cooking
- Water tank feature
- Herb Garden
- B+G
Biogasster
- G+Rooftop
Community kitchen
- G+1
Distribution centre
- G+Rooftop
Raw food kitchen



#06

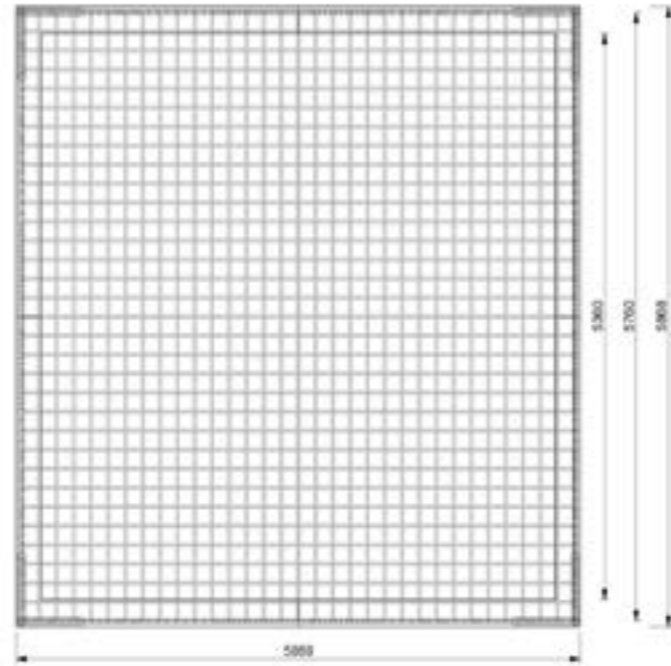
lampshade*installation challenging the perception of light***location** singapore**typology** installation**nature of project** internship project (collaboration of Snohetta & Bambooroo)**role in process** drawing, on site construction, execution**individual/group** group

Lampshade is an installation constructed by simple bamboo structures covered with photovoltaic cells. By intensifying the light experience in an interior dome space, the aim is to show visitors the direct link between capturing sunlight, the production of electricity, and the power of light.

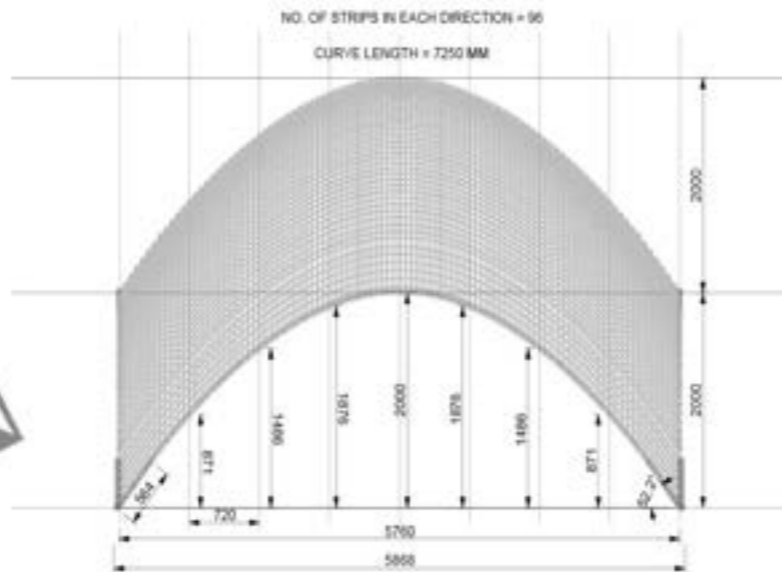


The juxtaposition of the hand-made bamboo structure and the ready-made lamps create a tension between contextual and generic products, encouraging the discussion of controversial opinions relating to environmental approaches.

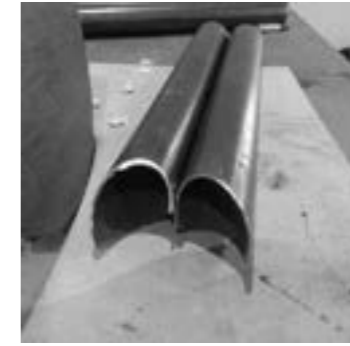
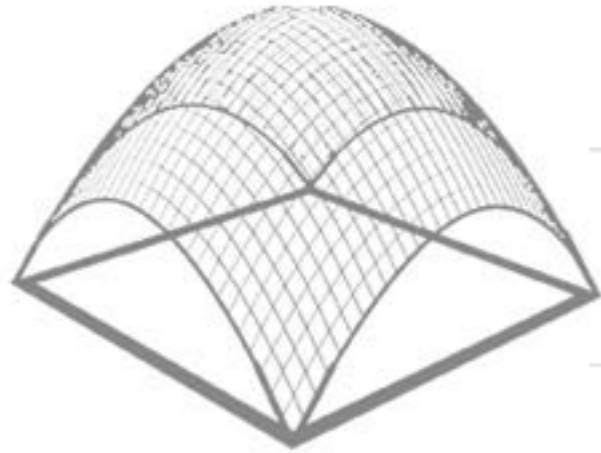
The structure is a paraboloid form, which is created by a grid of exactly same parabolic curves forming a mesh by displacing each curve to form an opening below whilst blowing up above towards the centre.



roof plan

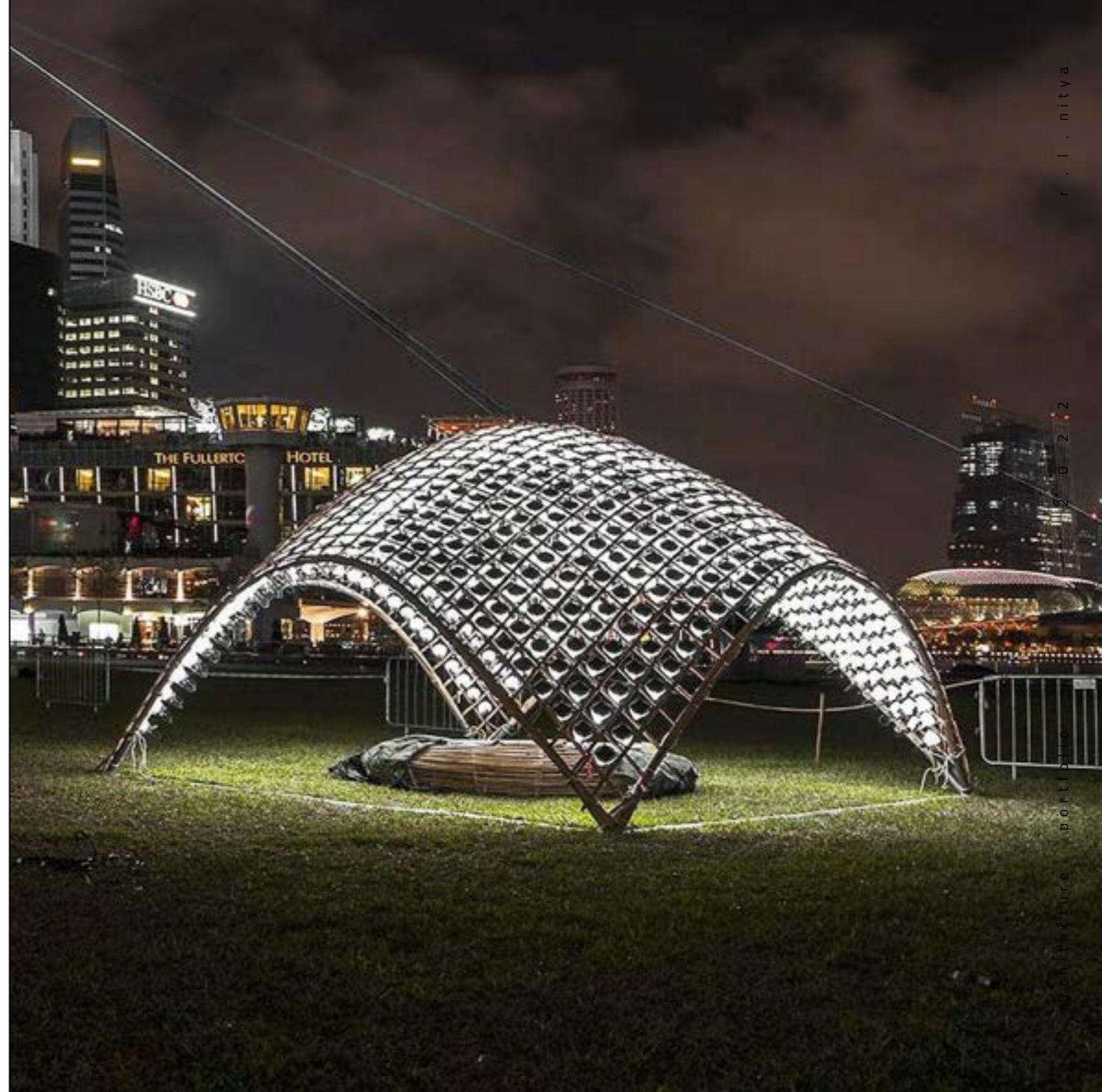


section





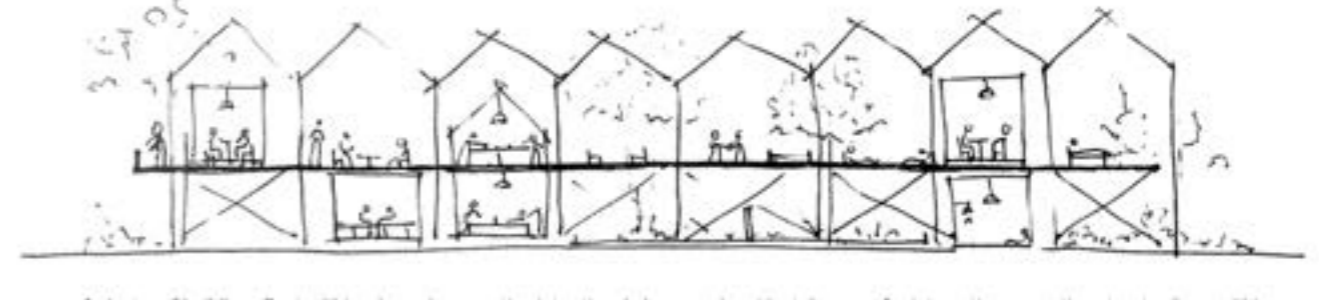
The structure creates shade and an escape from direct sunlight during the day, and intensively lights up at night using solar energy collected during the day. The transformation and continuance of light happens within the same system, bringing the light from outside to inside.

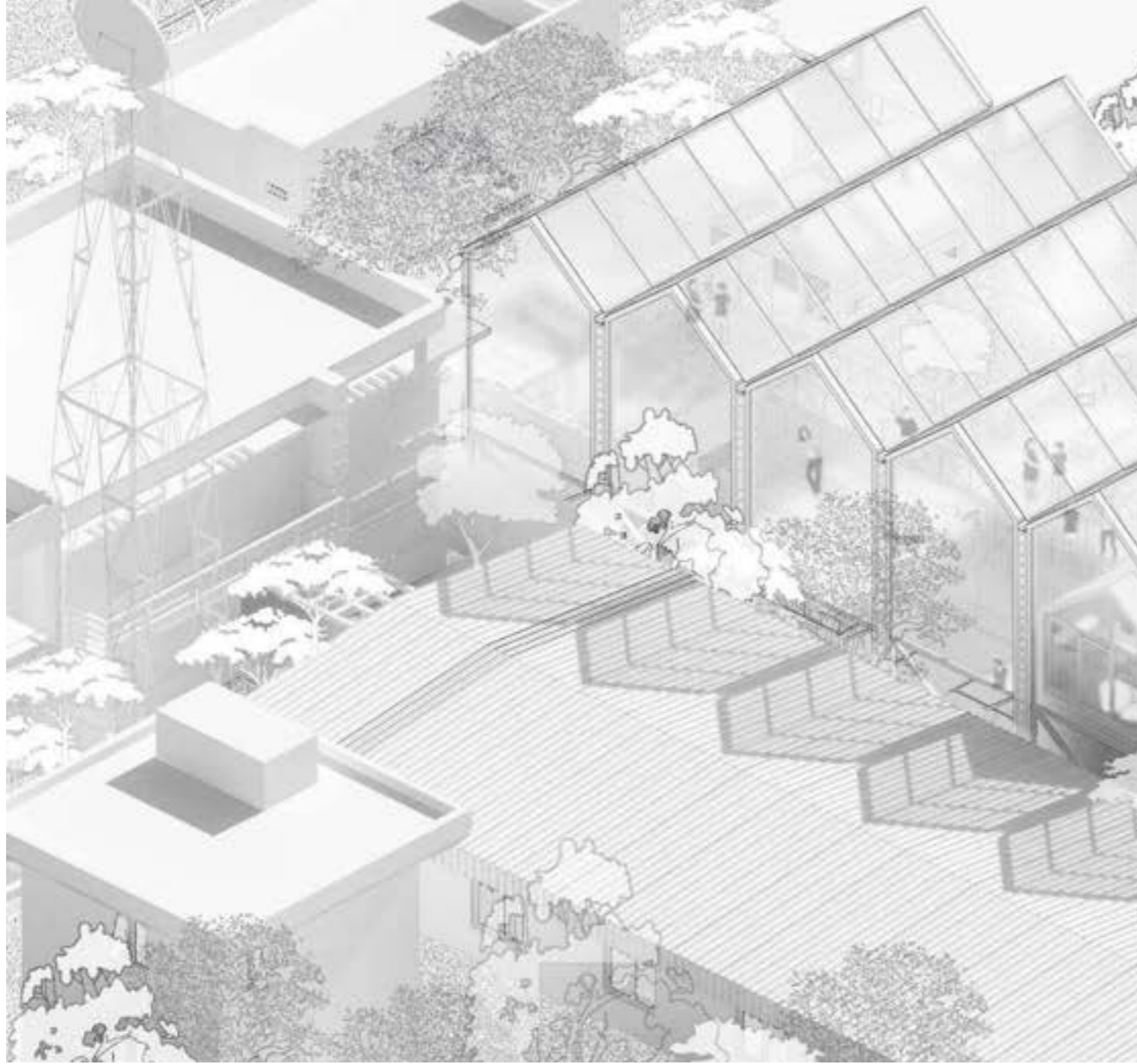


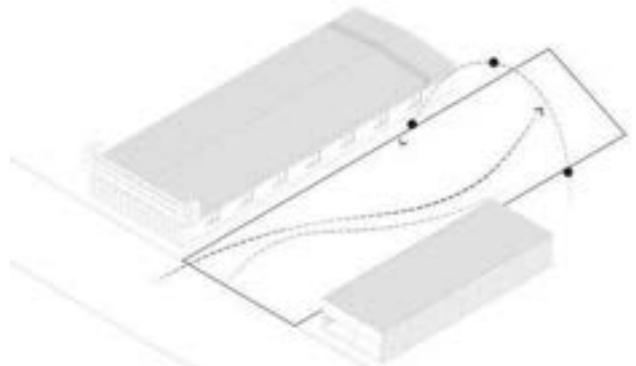
#07

outside in*a recreational zone within a shell***location** coorg, india**typology** recreational**nature of project** professional
project at Evolve studio**role in process** design, drawing,
presentation**individual/group** group

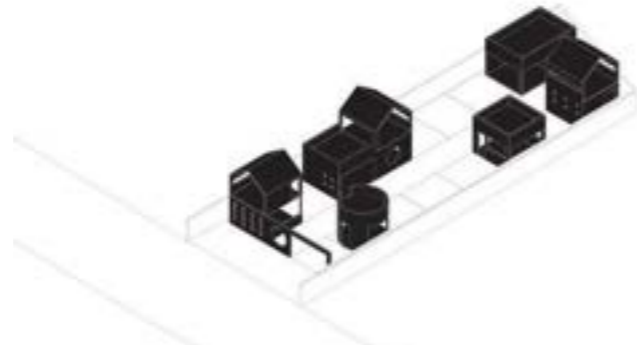
*A cluster of buildings float within
a boundary creating intentional
plazas and accidental spaces for
interaction, recreating a street
culture within.*







i site - The linear site providing opportunity to create a streetscape narration.



ii blocks - A strong grid pattern which emerge out as blocks of varying heights encasing sport related activities.



iii plazas - Open spaces are carved out of the grid pattern creating courtyards and plazas as in a street.



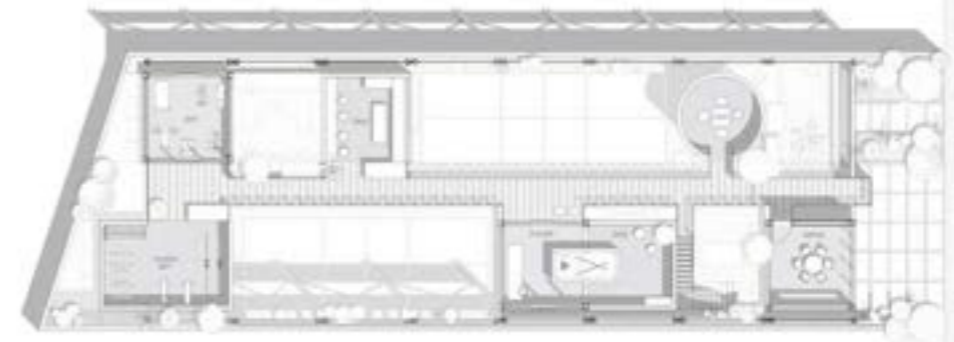
iv bridge - The upper level of the street forms the soul of the space tying the volume together and a major zone of accidental interactions amongst activities.



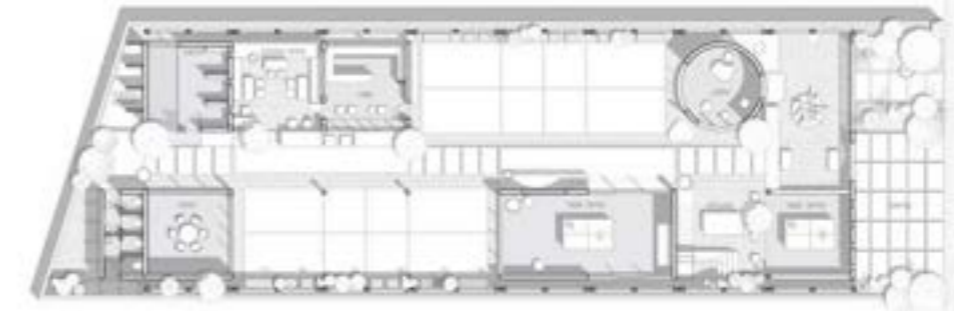
v urban furniture - Furniture and urban utilities thrown around to create engaging spaces giving life to the form and space.



vi shell - The shell creates an inner world of enriching activities, feeling vast yet cozy in a busy setting.



ground floor plan
A clear square grid planning resulting in an organized yet diverse planning which coherently creates an organic community.



first floor plan
The bridge deck branches out organically into the rooms and terraces comprising the gym, billiards, cards room and informal cafe spaces.



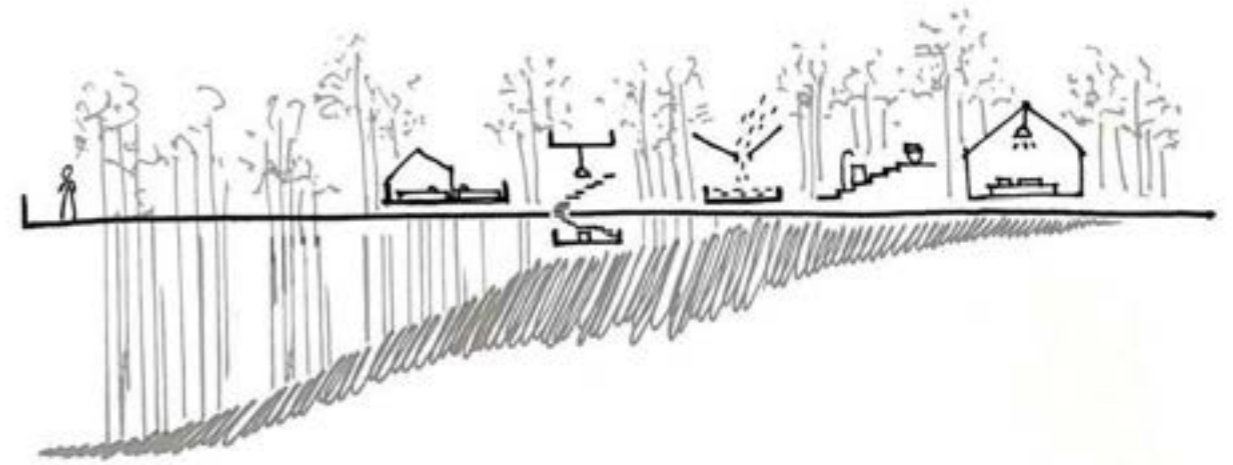
roof plan
The roof-scape defined by the array of peaks, creates a landmark in a busy setting. A translucent light box that glows during day and night.



#08

distil*incepting forms from the terrain***location** coorg, india**typology** hospitality**nature of project** professional
project at Evolve studio**role in process** design, drawing,
presentation**individual/group** group

Pure geometric forms exhibit themselves on a spine - each unit expressing itself uniquely on the terrain, creating soulful experiences as resort rooms.



roof scio plan

Set on a steep contoured terrain, each of the resort rooms express itself in a pure geometric shape composition. A strong axis connects the forms as a bridge through the open and closed to access the rooms. A journey through the contours leads the user to a large receiving courtyard. Spatial transition from the public to private spaces happens along the spine steadily.





#09

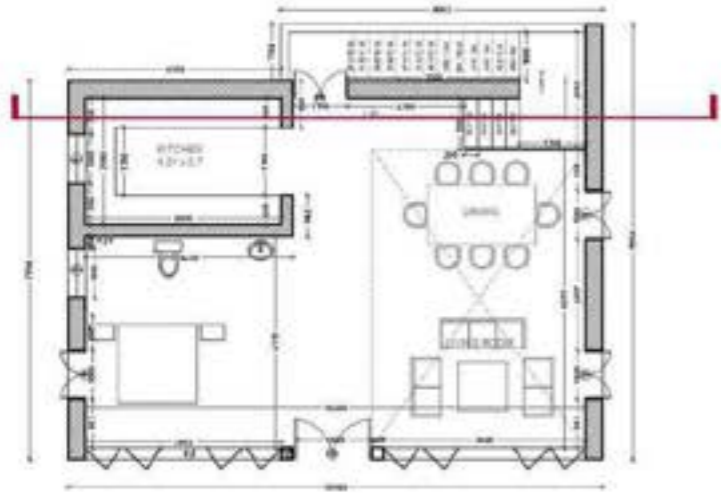
artist house*cabin hugging the landscape***location** goa, india**typology** hospitality**nature of project** internship

project at Studio MoMo

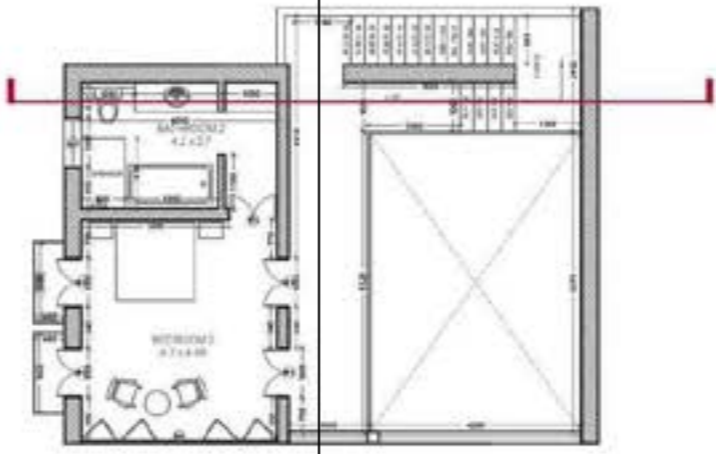
role in process drawing,
presentation**individual/group** group

*A creek side studio for an artist
- a simple form born from the
context with a hint of the native
material and form language of
Goan houses.*

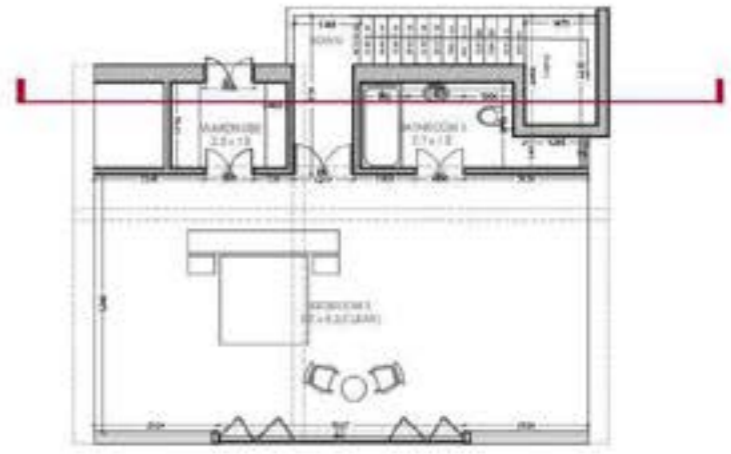




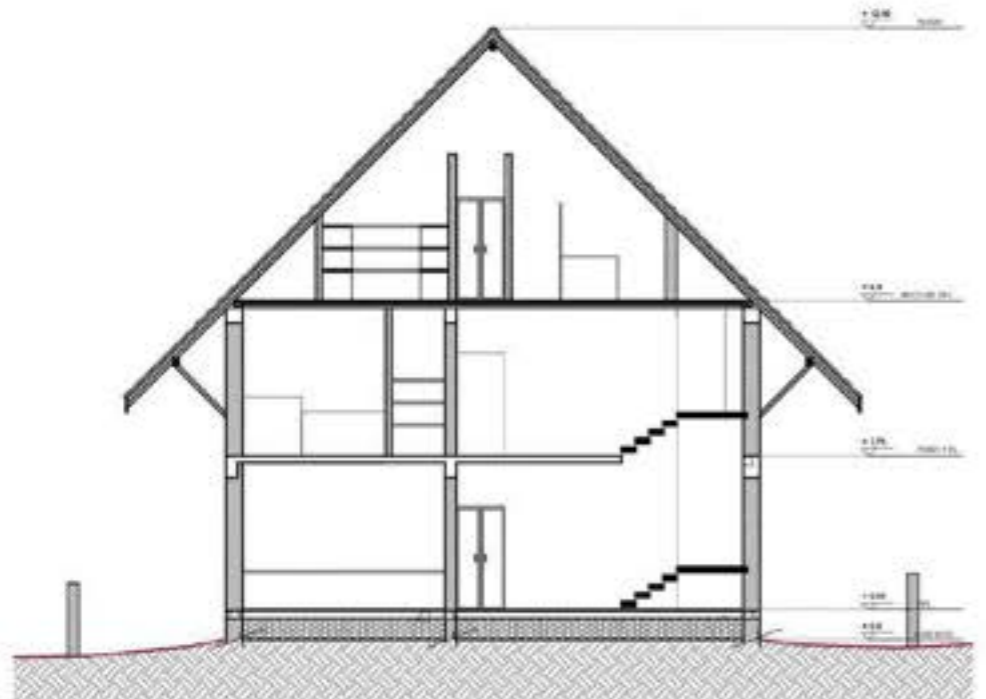
ground floor plan



first floor plan



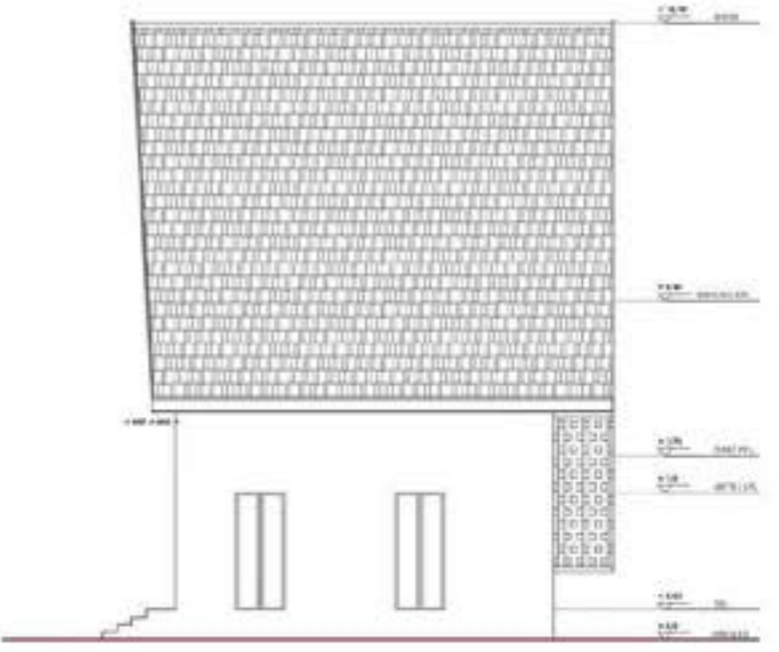
second floor plan



section



front elevation



side elevation



#10

the cantilever

beach house reaching out to the sea

location chennai, india

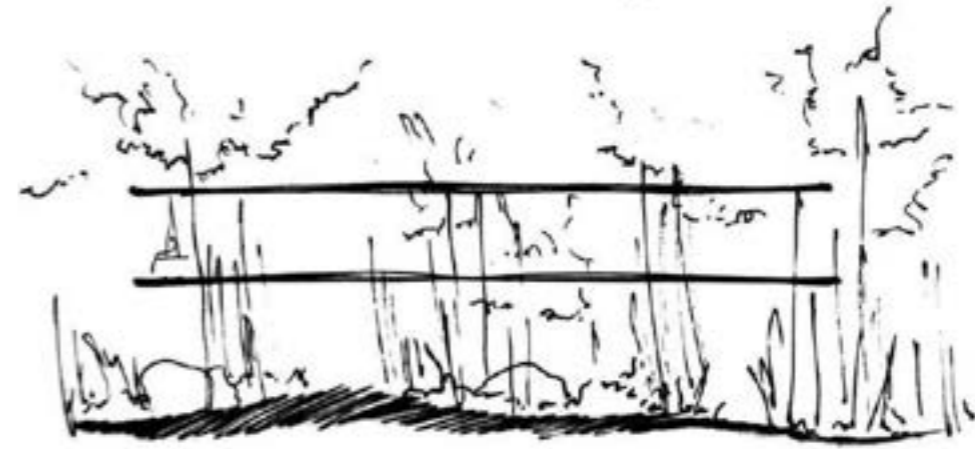
typology residential

nature of project professional project at Evolve studio

role in process design, drawing, presentation

individual/group group

A floating volume amidst the landscape that overlooks the ocean.



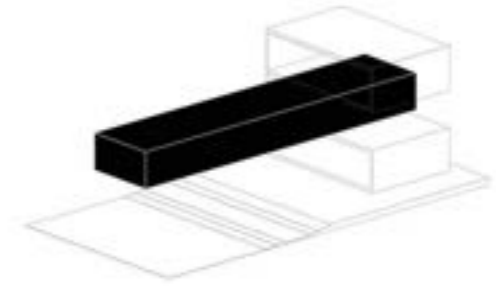


the linear volume reaching put towards the sea - the landscape, water & built in parallel axes

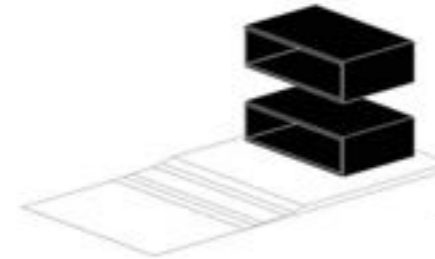
i site



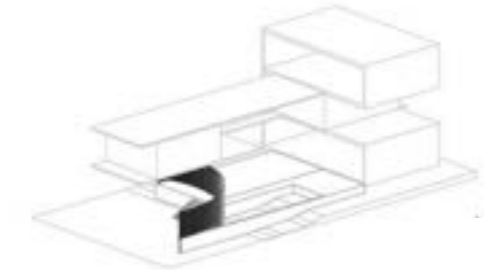
ii floating mass



iii private rear mass

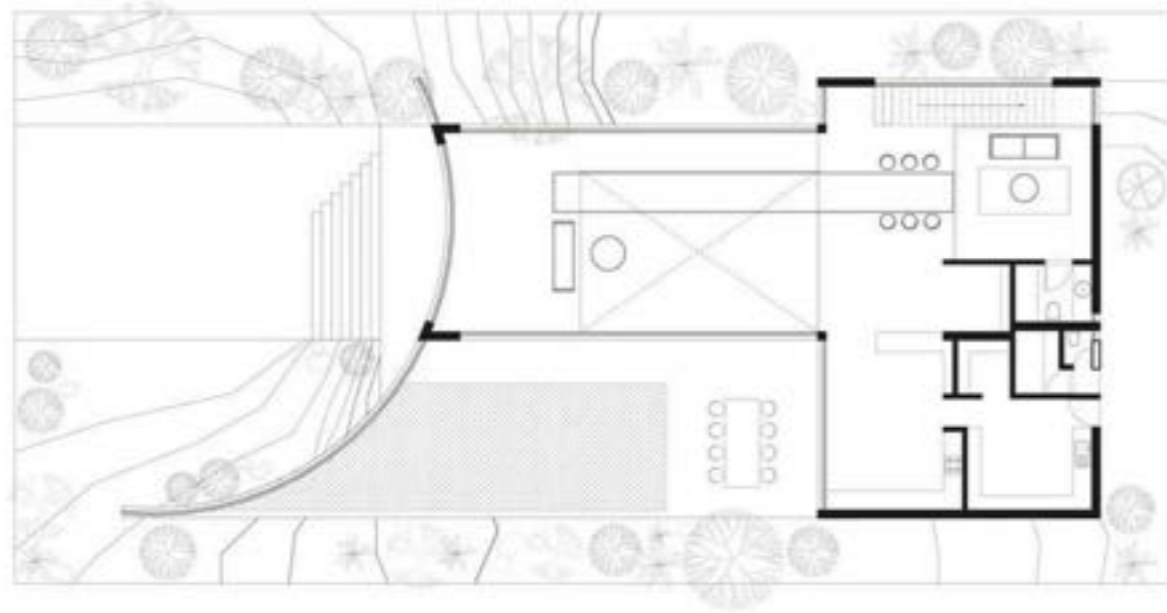


iv entrance court



v the form

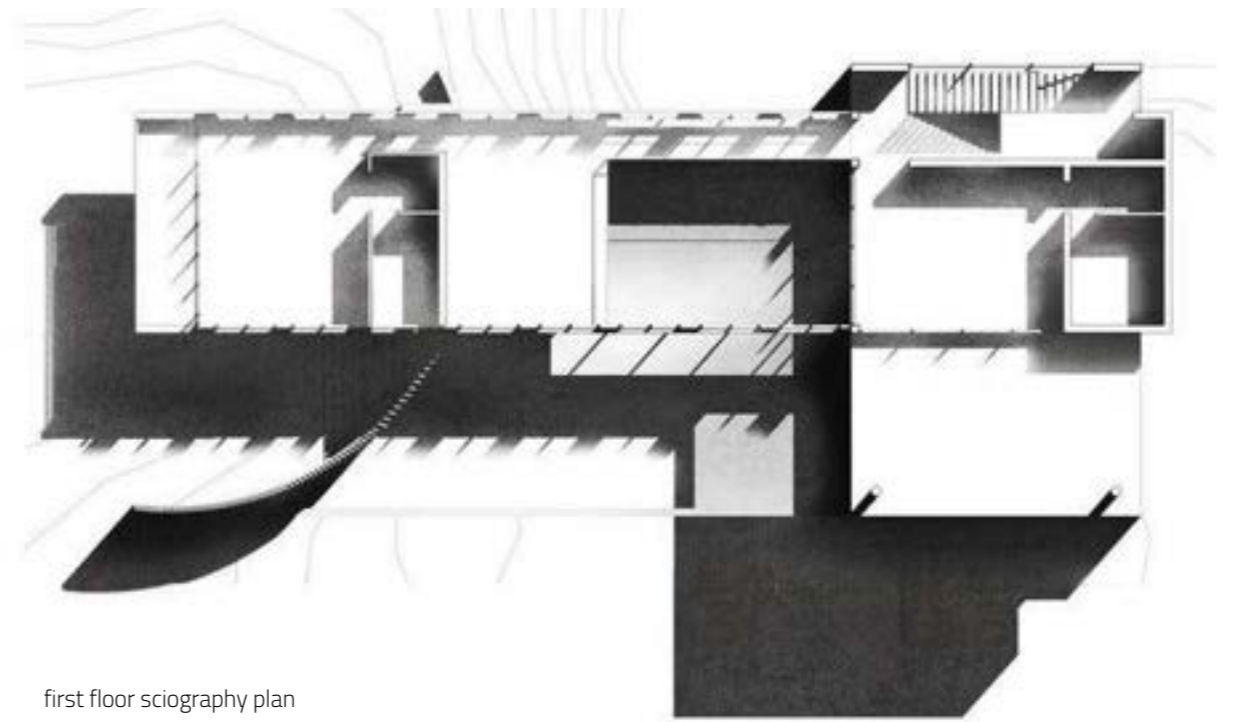




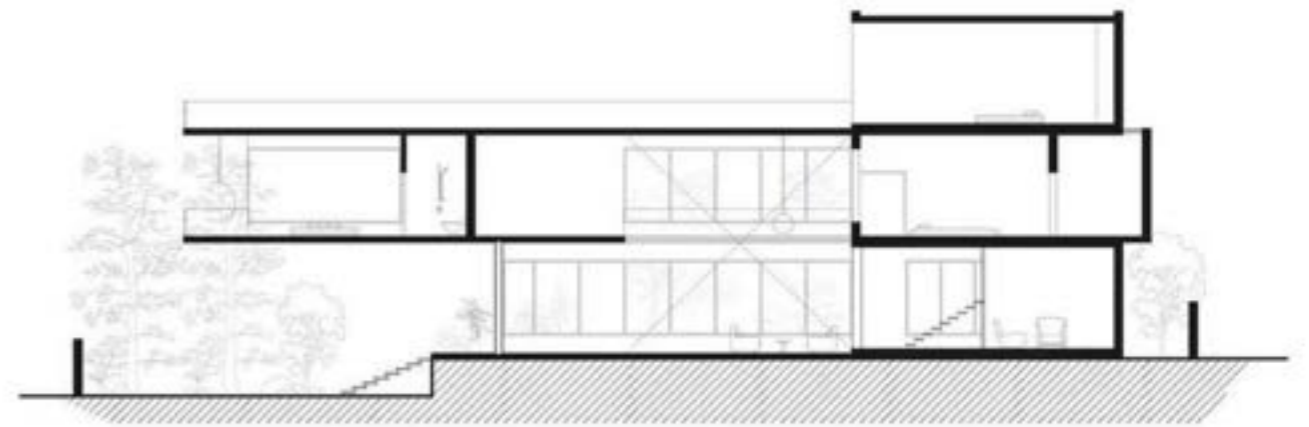
ground floor plan



side elevation



first floor sciography plan



section



Wood - metal union
kinked MS handrail welded to MS plate fixed on 2'x 2'teak wood



Triangulated grab bar
Three MS rods combine with intermediate ties to form a steady grab bar



Three dimensional mesh rail
The triangulation drops down to the floor for vertical support



Louvered vents
Grooves for louvered frost glass vents in the restroom slit windows with MS safety rods



Stone - wood - metal
Granite stone sits above a series of wooden vertical louvers to form an arched curve in the entrance court



Folded metal plate stair
MS plate folded to form a single flight, parallelly another flight is staggered for left-right step access to make a single user stair to terrace.



#11

tangent

a school revolving around a strong social core

location coimbatore, india

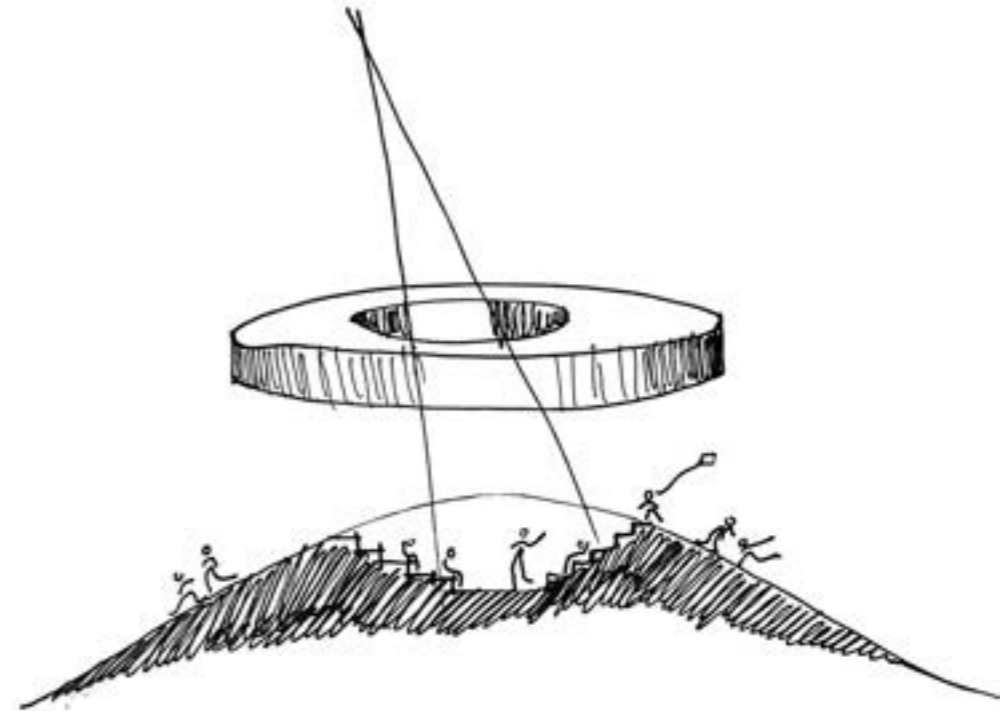
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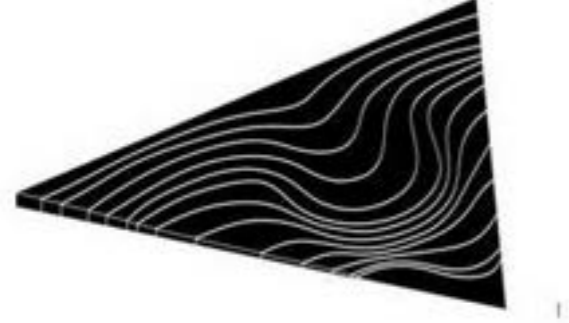
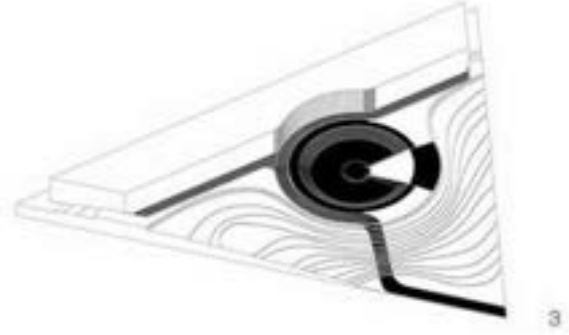
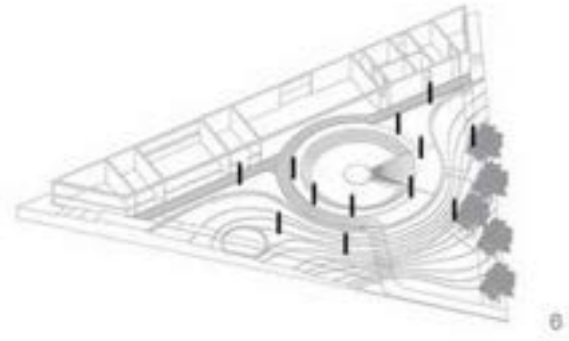
nature of project professional project at Evolve studio

role in process design, drawing, presentation

individual/group group

The vision was to create a strong social core in a form that brings the school together. The site being triangular, the proposed form fits in like a glove in a monolithic shape grammar with the circle and its tangential line.

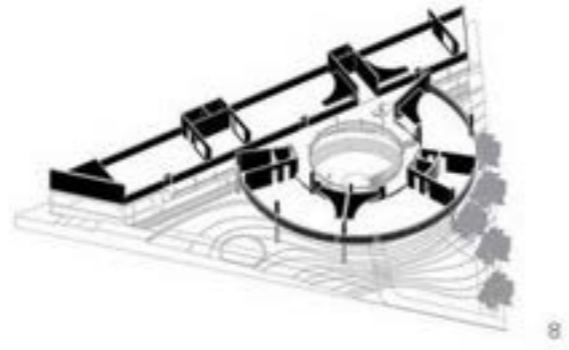




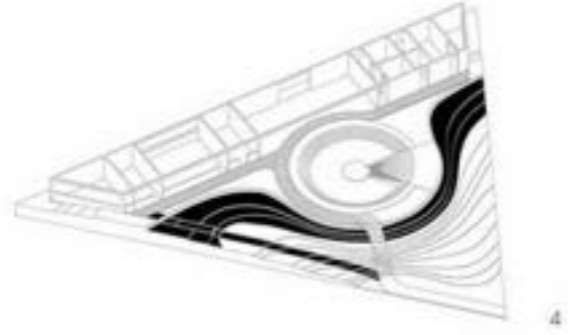
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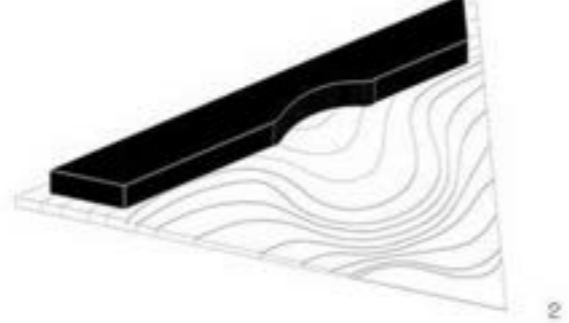
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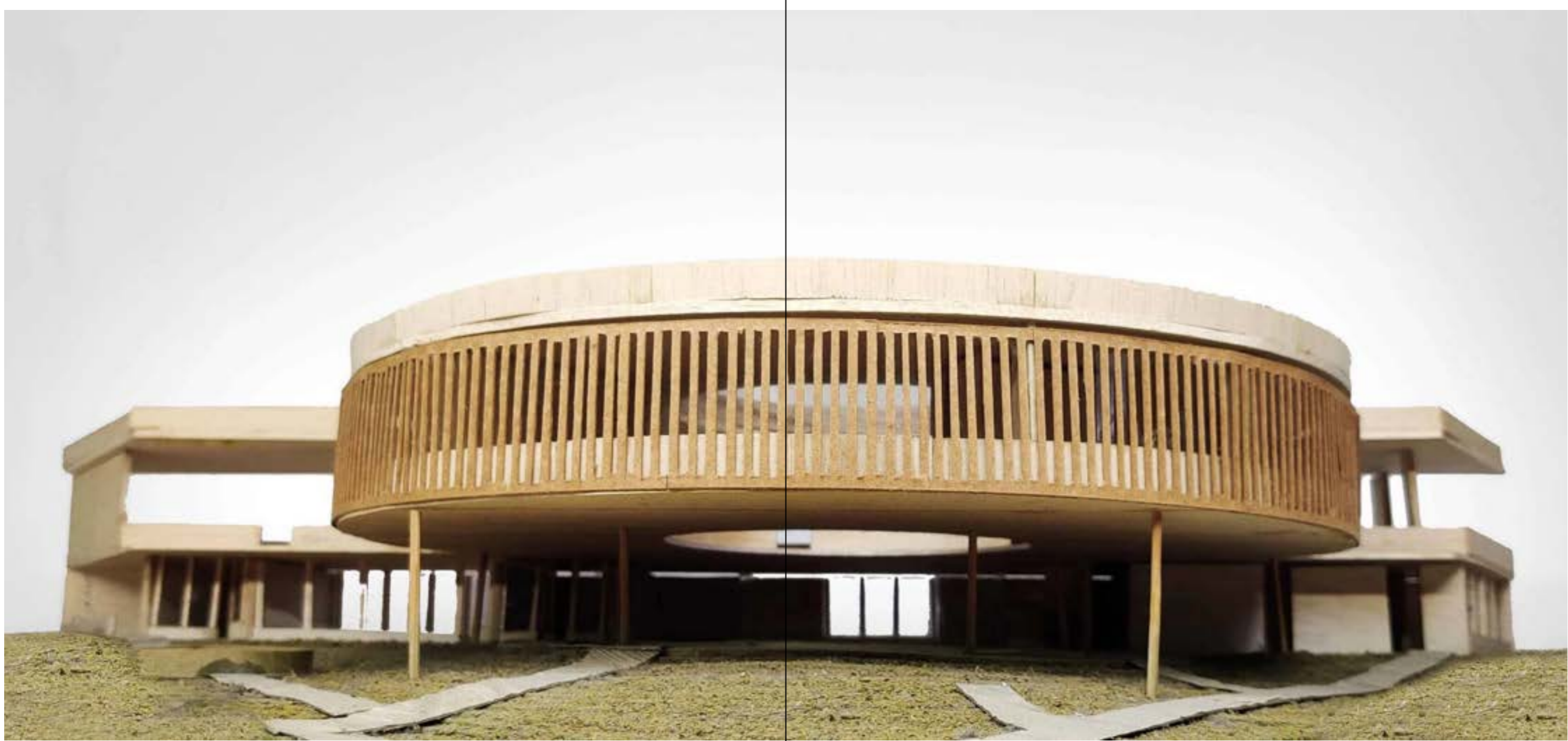


4



2





#12 miscellaneous works

the mini brick

cellular configuration

nature of project personal project

role in process design, model

individual/group individual

The idea was to create miniature bricks to self-explore form compositions with a cellular material such as a brick that can be multi iterated to explore monolithic form geometry. Locally available clay was sourced in Chennai, later pigmented for tonal variants. The bricks were partially sun baked and oven baked as in a kiln after packing them in tablet packs for shape uniformity. The material composition was tweaked based on results.



#12 miscellaneous works

undulate

a non-rigid pattern language exploration

nature of project workshop
outcome at Evolve studio

role in process design, model

individual/group individual

Pattern language exploration activity - A maze through the planar folds, spaces created by the organic planes of varying hierarchy creating a subtle drama throughout. Light, shade and shadow are felt softer in organic planes. Corrugated sheets to add a layer of texture to the space.



#12 miscellaneous works

indian woods

wood wearing its novel identity

nature of project venture at
Evolve studio

role in process design, drawing
individual/group group

Wood being a fascinating material, inspires a lot more purpose in everyday life, much more than just the architectural purpose previously sought. A product and lifestyle design venture by Evolve, wood comes to life in exciting new ways in a design language extended from its architecture. Glimpse of the experiments are shown (right), that are yet to be released.



let's create together

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