

ARCHITECTURE PORTFOLIO

DEEP VARMA

Academic Work
Work Experience



DEEP VARMA

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About me

Exploring the possibilities of designing spaces that go beyond the physical built environment of architecture is my key interest. For me Architecture is just a foundation step towards art and design. A person with passion for Traveling, Exploring, meeting new people and experiencing different journeys i have always thrived on building experiences that involve and enhance all of our senses.

My passion for gaming keeps me on a competitive edge that makes me strategically question my every move while designing. Being a strategic planner along with thinking on my feet is what creates my intuitive designs that are backed up with possibilities on all sides.

Education

B.Arch - IDEA, Indus University

HSC - Delhi Public School
Bopal, Ahmedabad

SSC - Delhi Public School
Bopal, Ahmedabad

Languages I Know

English
Hindi
Gujarati
Punjabi

Hobbies



Work Experience

A. Construction:

1. Building a Model based on the concept of tensegrity using Bamboo and Cables in Bali, Indonesia

B. Measured drawings and documentation of the following:

1. Vernacular techniques, Himachal Pradesh Documented a vernacular architecture in Naddi and Bal village.
2. Ludiya village, Kutch, Gujarat Documented a cluster of houses in the village.
3. Jaipur, Documented six water structures and developed the understanding of collection and treatment of water without the use of modern technology.

C. Workshops

1. Material exploration - Explored materials such as plaster of paris and acrylic. Made models using the same materials.
2. Photography - Understood the basic concepts of using a DSLR camera. Made photographs of Birds, Animals and objects.
3. Bamboo Construction - Constructed a Bamboo shed for sitting area by understanding and using Bamboo Joineries.
4. Architecture Photography - taking the photography skills to another level. Composing and capturing photos that express a built's form and shape and emotions.
5. Narratives - Read various works of literature, summarized them and further created our own story using keywords from the piece of literature given.

Work Experience

| | | | |
|---------------|----|---------------|---|
| 2017 June | to | 2017 December | - |
| 2018 January | to | 2018 December | - |
| 2019 March | to | 2020 January | - |
| 2020 February | to | 2020 July | - |

Software Skills



Currently Curious in

Architecture of Fiction and Entertainment
Parametric Architecture
Cinematography
Literature

Intern at **banduksmithstudio**, Architecture
Designer at Varsha Design Consultant, Architecture Studio
Interior and Product Designer at andteak, FurnitureStudio
Internship at Hariom Conbuidd LLP, Hariom Infrastructure

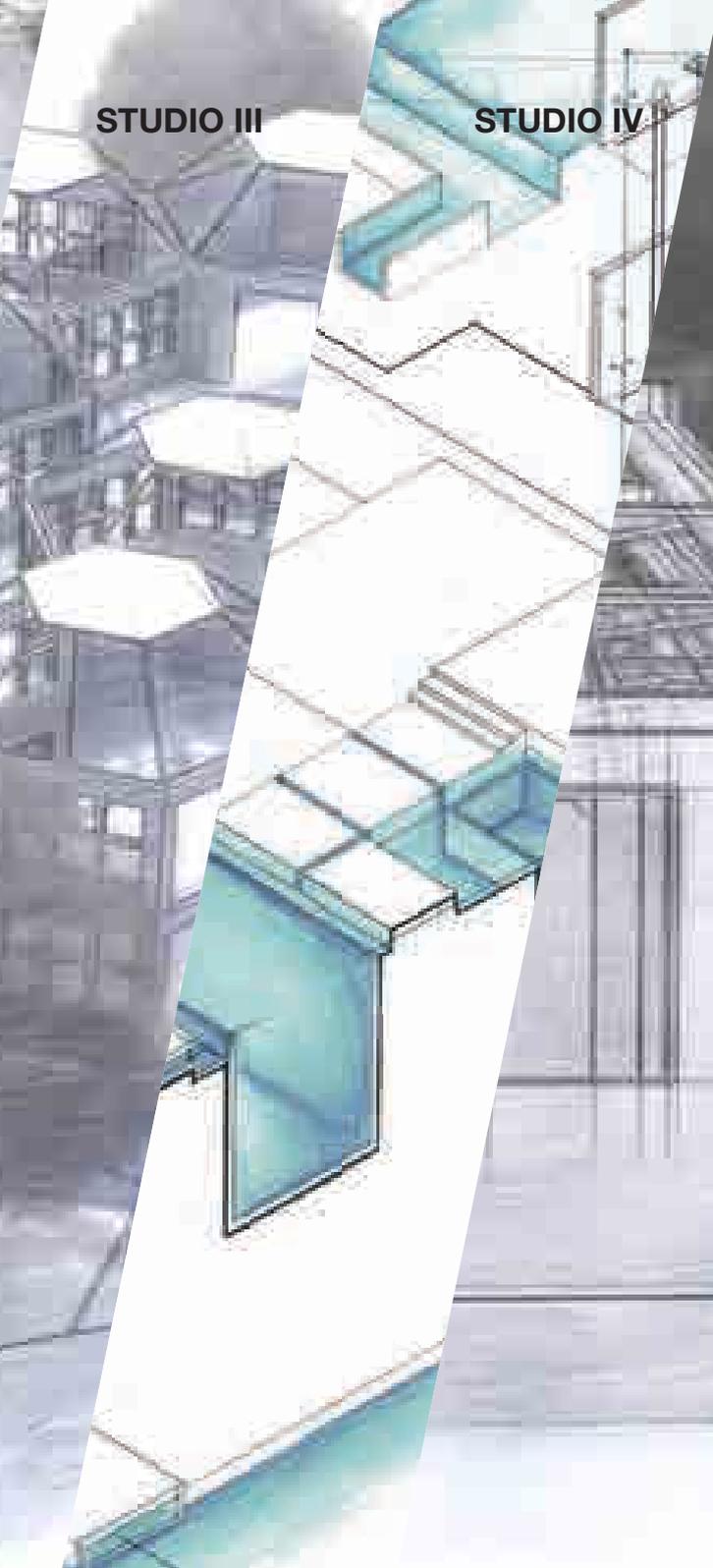
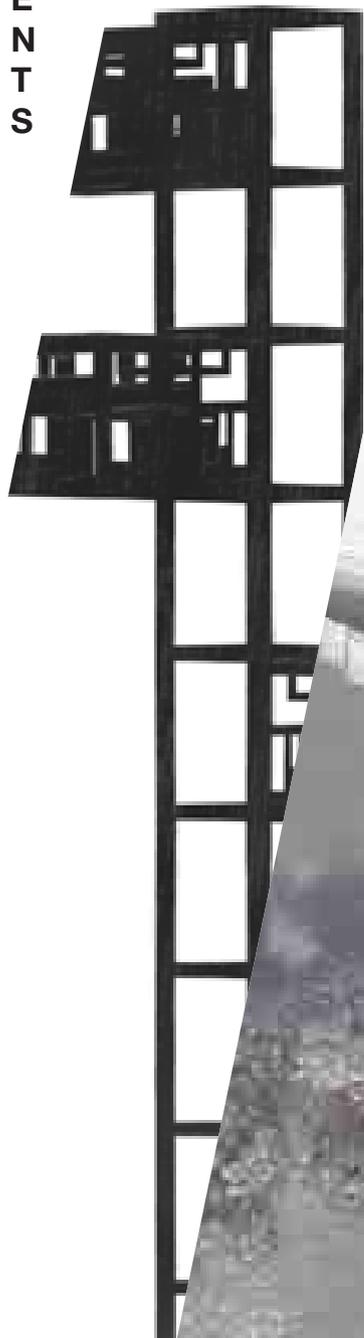
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STUDIO I

STUDIO II

STUDIO III

STUDIO IV



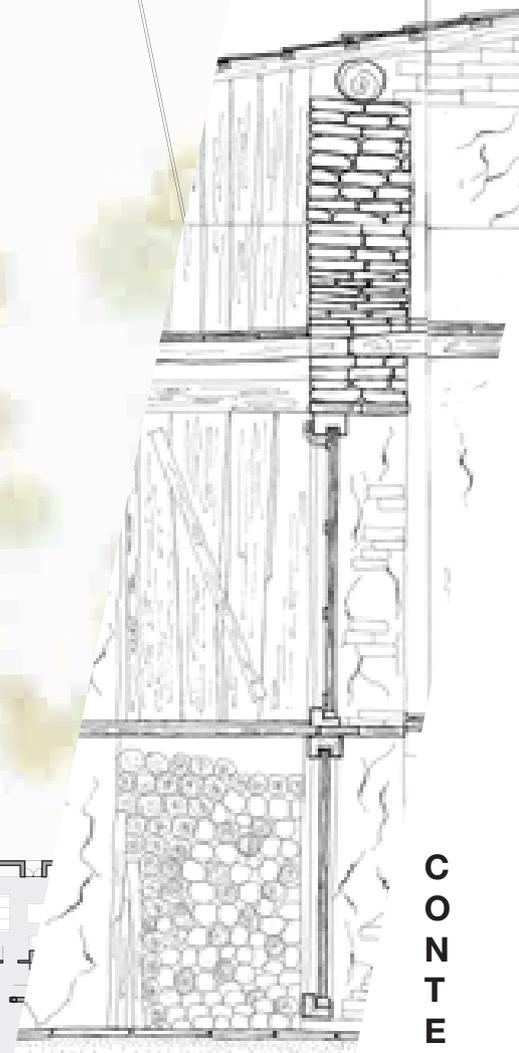
STUDIO V-VI

STUDIO VIII-IX

THESIS

WORK EXP.

WORKSHOPS



**C
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STUDIO I

Studio House

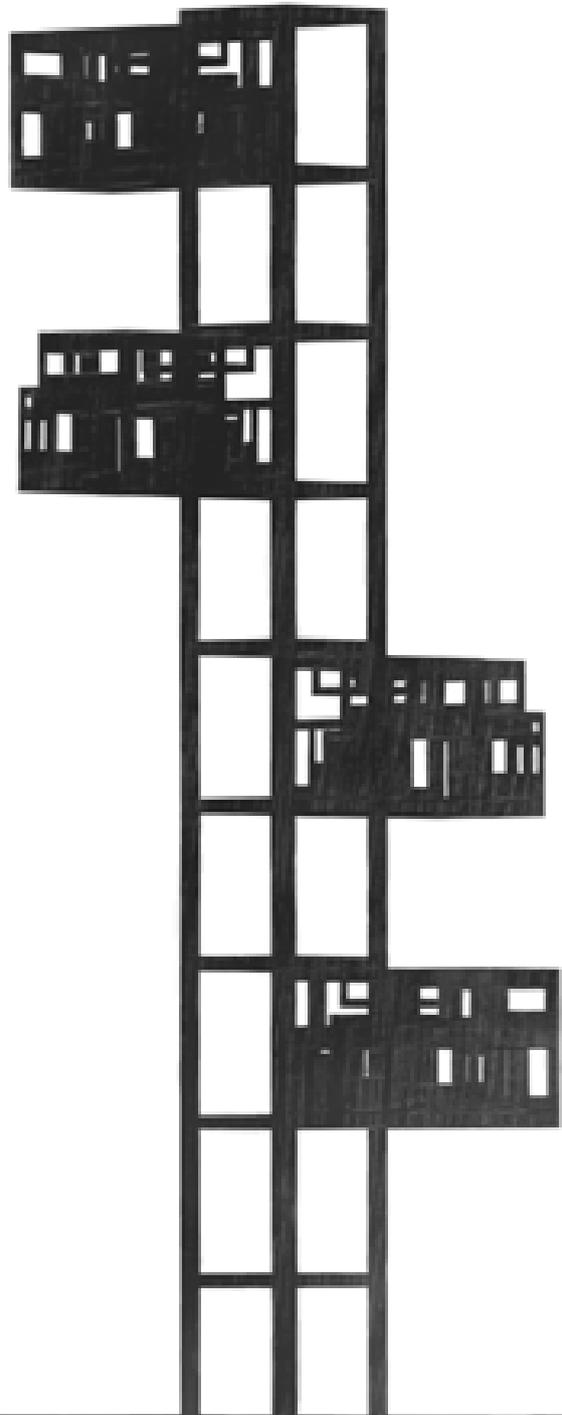
My Learnings

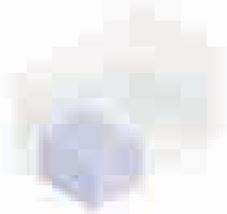
- Crafting Spaces : Understanding how to carve out spaces in a chunk of mass by introducing Vertical and Horizontal Planes.
- Nature of Spaces : Understanding the Nature of Spaces such as Public Spaces, Semi-Public Spaces and Private Spaces and the functions they host.

Designing a Studio House.
A Studio that confines basic functional spaces.

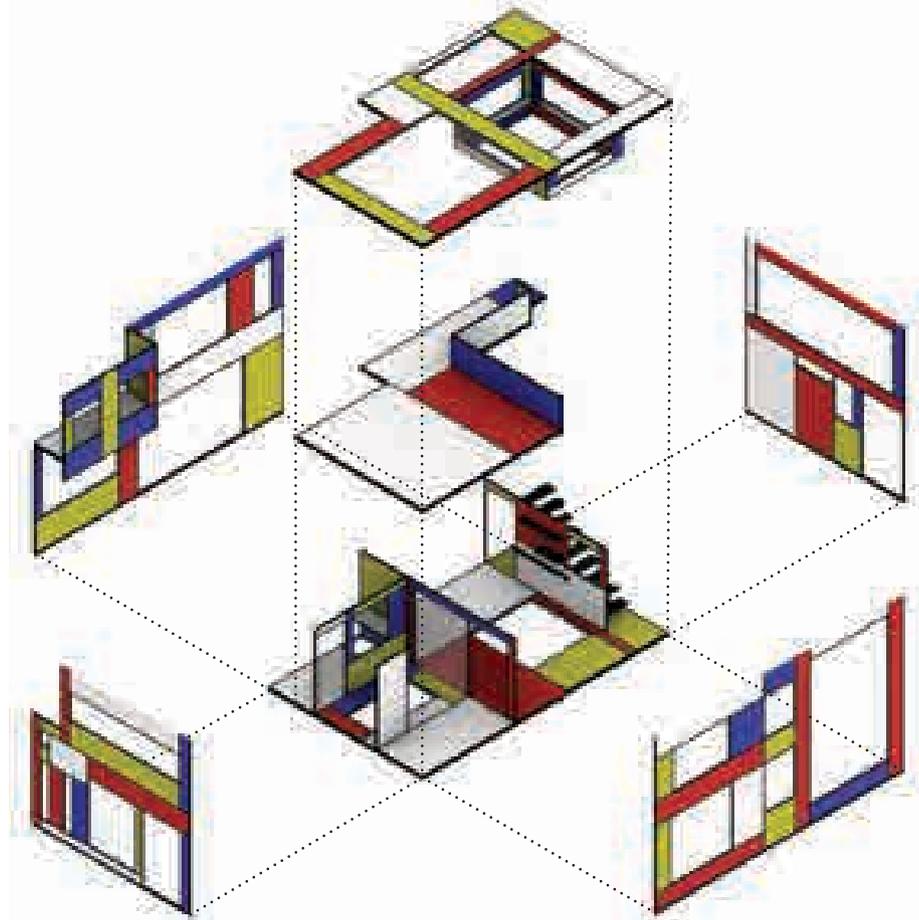
Further keeping in mind the Public and Private Nature of the spaces. The Studio House is a module that can be repeated in all directions of a tower.

Deriving its language from Neoplasticism, consisting of white divided by vertical and horizontal solid black lines. The in-between spaces are then filled with three primary colors; This technique was developed by an Artist, Piet Mondrian.

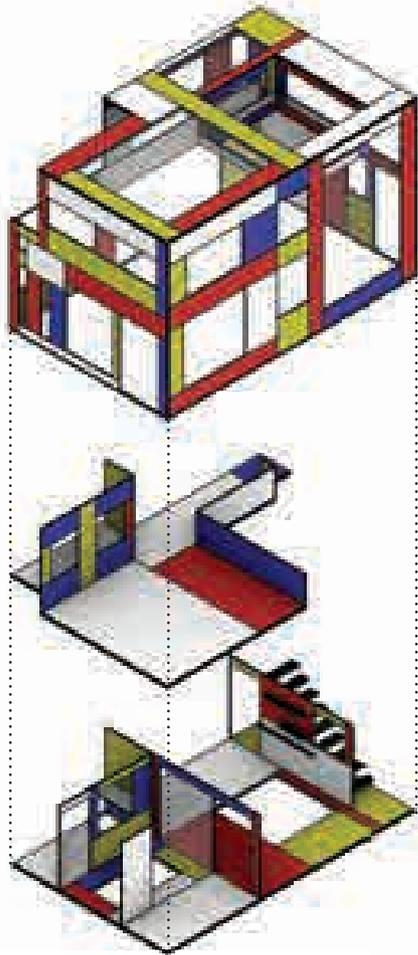




Nature of Spaces



Part to Whole Isometric View



Level Plates



The Tower

STUDIO II

Artist's House

My Learnings

Functions and Spaces

: Understanding different functions and how different quality of spaces are required to house each one.

The User

: Understanding the User, their routine patterns and spaces they inhabit throughout their routine and thus prioritizing and positioning them accordingly.

The Task at hand was to design a residence for an Artist.

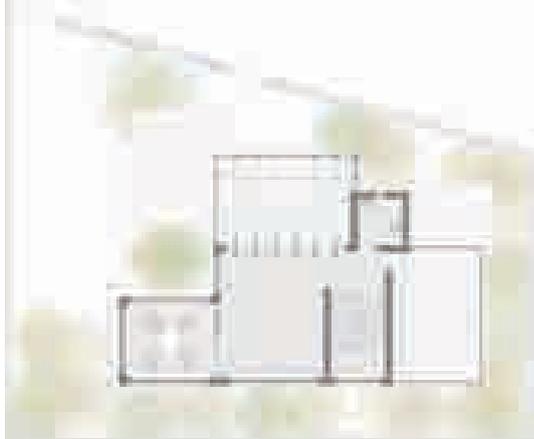
Being a Self-Employed person an Artist's daily routine patterns of using spaces in the house are very different to that of any mundane person.

Open Spaces are strategically composed to open towards the rich outdoor Nature.





Terrace Level Plan



First Floor Plan



Ground Floor Plan





Overall Isometric View



Section at First Floor Level



Section at Ground Floor Level

STUDIO III

Kindergarten

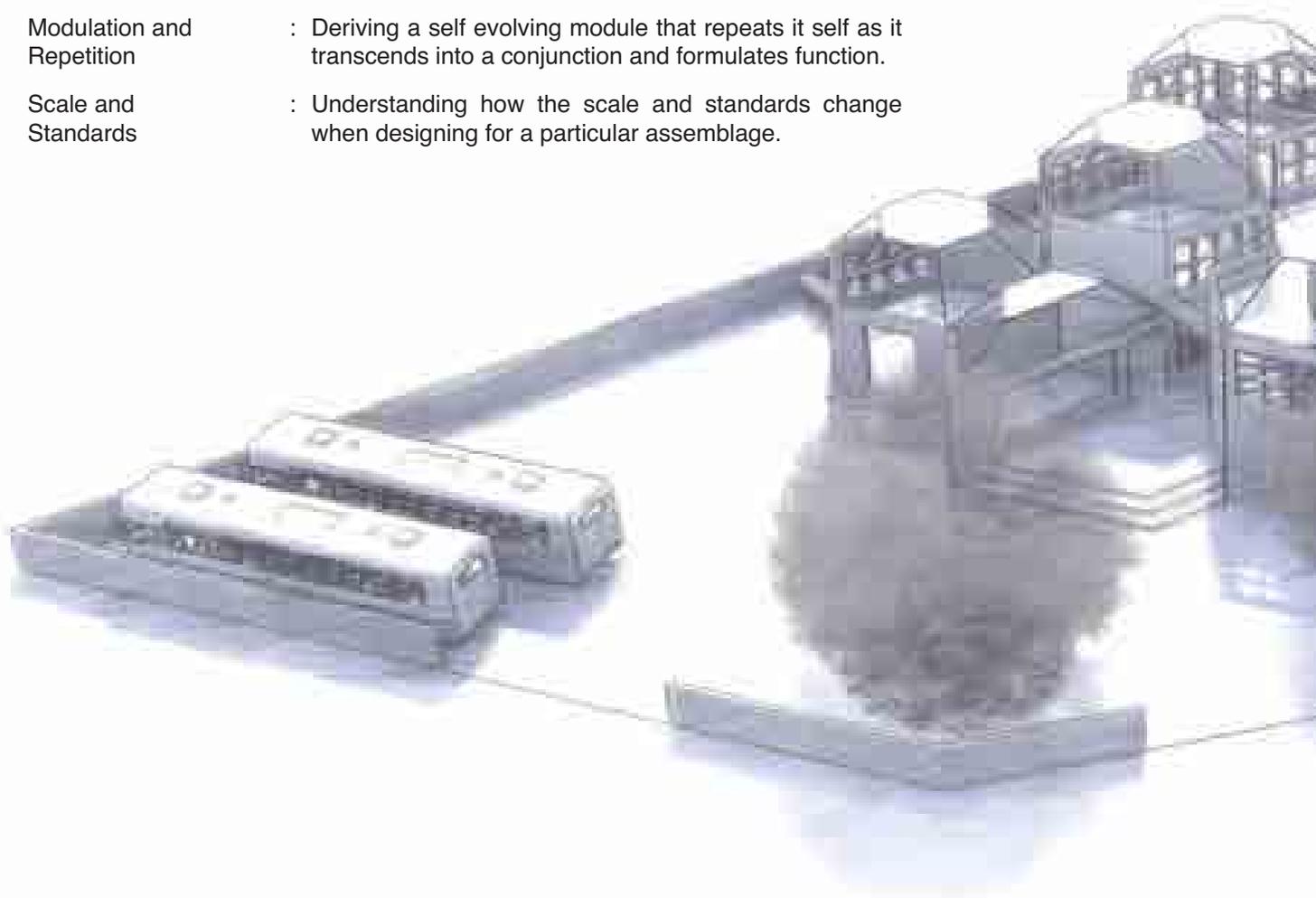
My Learnings

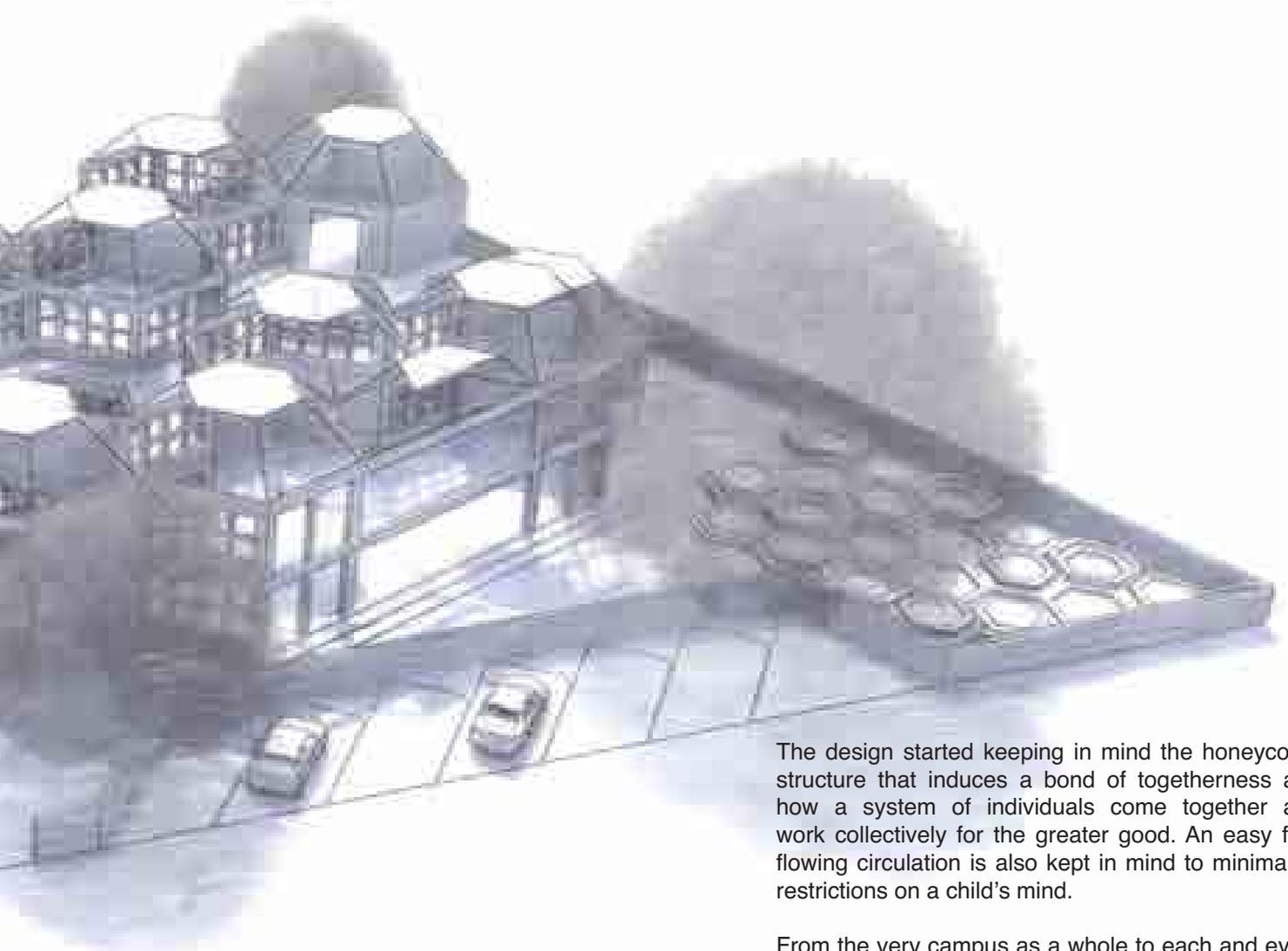
Modulation and
Repetition

: Deriving a self evolving module that repeats it self as it transcends into a conjunction and formulates function.

Scale and
Standards

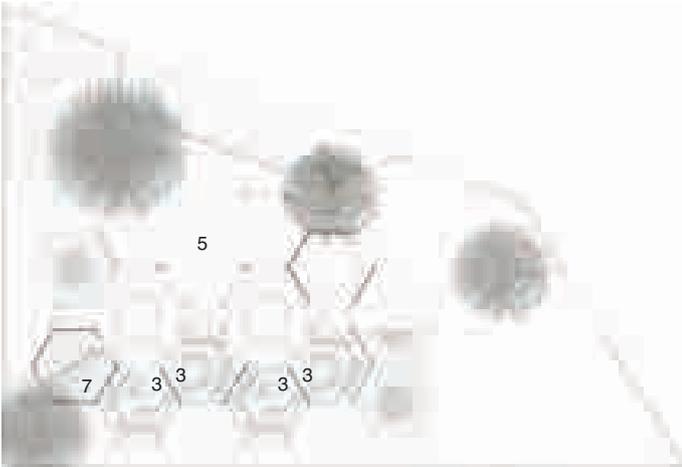
: Understanding how the scale and standards change when designing for a particular assemblage.



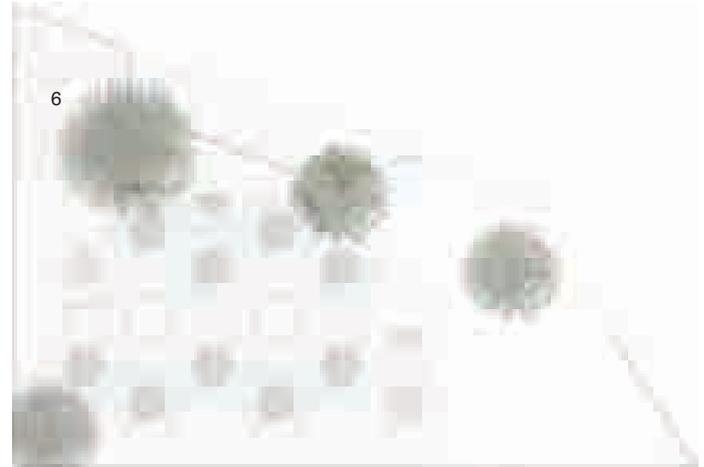


The design started keeping in mind the honeycomb structure that induces a bond of togetherness and how a system of individuals come together and work collectively for the greater good. An easy free flowing circulation is also kept in mind to minimize restrictions on a child's mind.

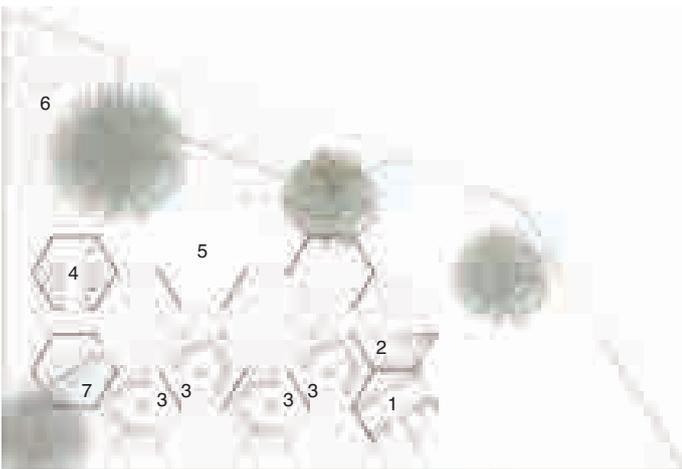
From the very campus as a whole to each and every fenestration designed to achieve maximum visual and aural connections, this is done to make sure that the user is neither restricted nor insulated at any point of time to maximize individual as well as peer to peer learning.



First Floor Plan



Terrace Level Plan



Ground Floor Plan

LEGEND

- 1 - Administration
- 2 - Staff Room
- 3 - Classroom
- 4 - Audio Visual Room
- 5 - Multipurpose Hall
- 6 - Jungle Gym
- 7 - Toilet



Section through Classroom - Passage



Overall Isometric View



Section at Ground Floor Level



Section at First Floor Level



Section through Multi-Purpose Hall; Double Height

STUDIO IV

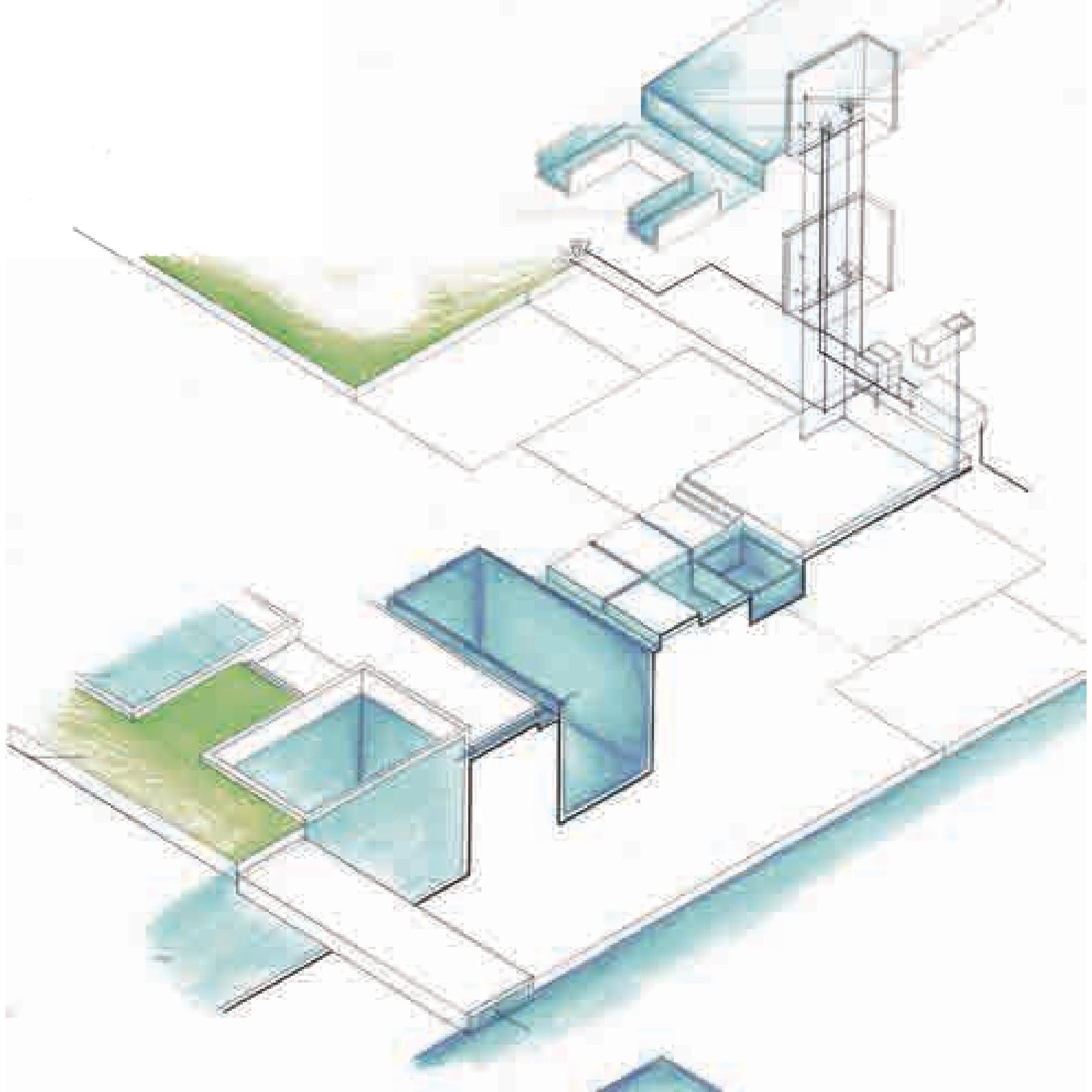
Re-Source Housing

My Learnings

- Community Spaces : Understanding how the nature and scale of spaces changes from Individual - Cluster - Community.
- Resource Management (water) : Deriving the amount of water required for all the daily chores and further optimizing the use of Portable and Grey Water as well as Utilizing Black Water.

In an attempt to create a housing community that works together as one single unit in managing a particular resource, in this case water.

A program for low cost housing community was set up. The structures are designed in such a way that it collects rainwater, harvests it and further optimise its use.



The Site
Anhilwad Patan



The Sahastralinga Talav



Site - Context

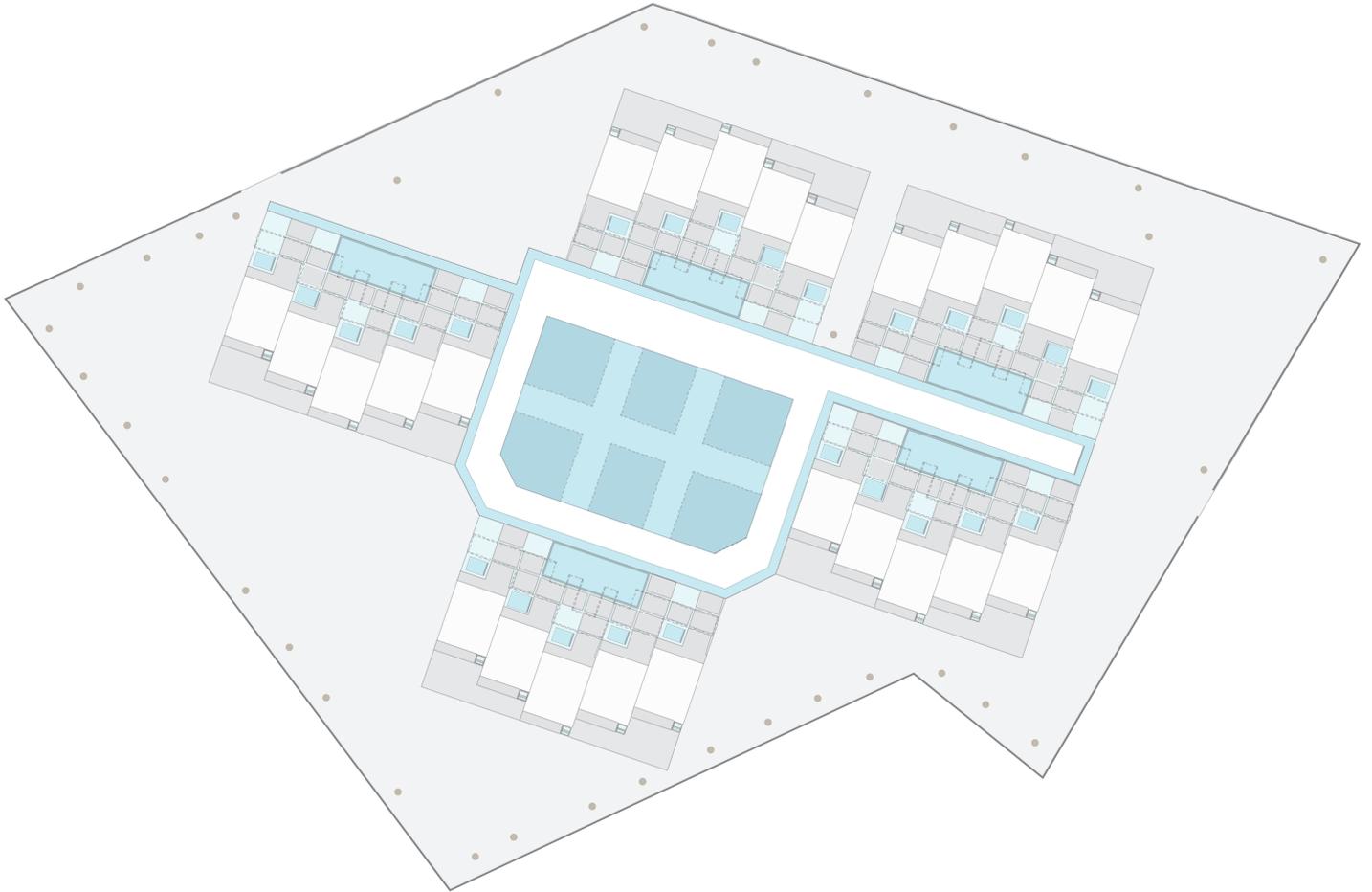
The Site has a strong historic context of Rani - Ki - Vav and The Sahastralinga Talav.

The ya re nationally renowned water structures built for the purpose of storing treating water and further using it for daily use and drinking.

The daily needs around site are met by bore-wells that decreases the water table of the whole region. This community focuses on Rainwater Harvesting and further optimal use and utilization of water by treating and recycling and reusing both Grey and Black Water.



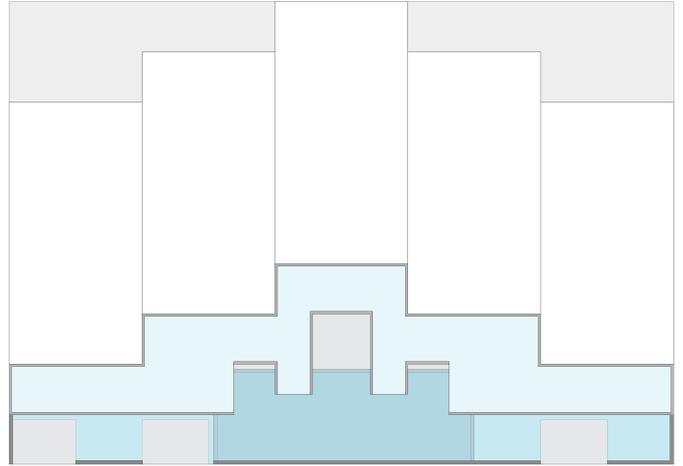
Rani-Ki-Vav



Water Interventions below Ground Level



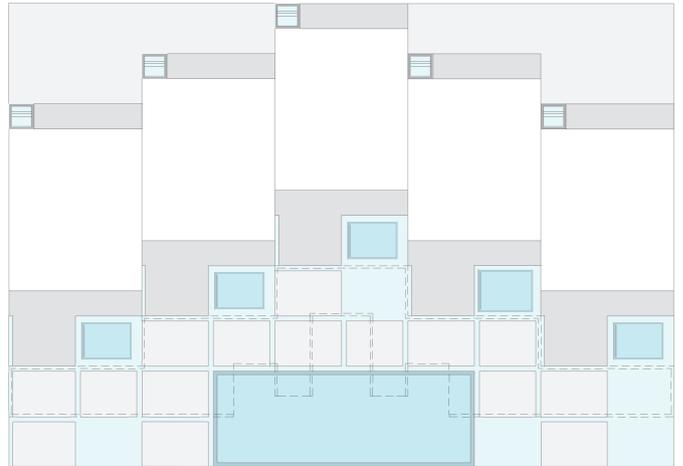
Cluster : First Floor Plan



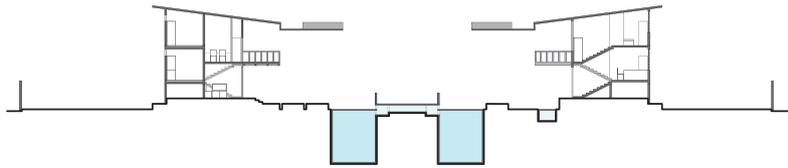
Cluster : Terrace Level Plan



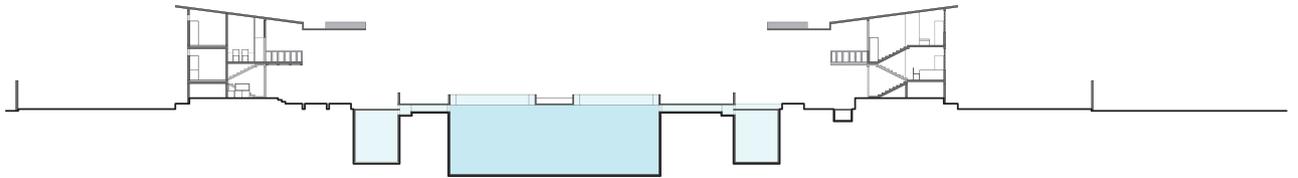
Cluster : Ground Floor Plan



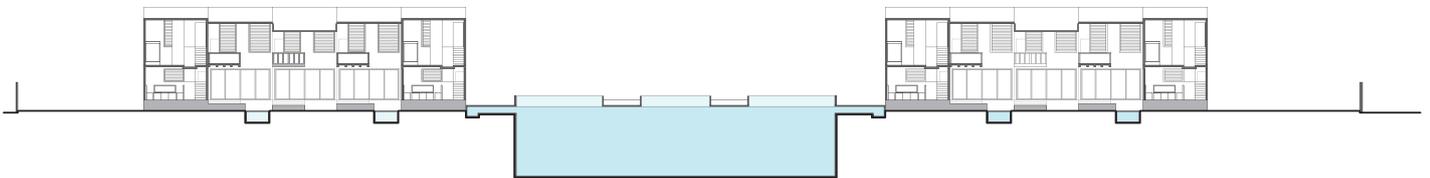
Cluster : Below Ground Level



section through water tanks of two different clusters their internal connection and its connection with Individual water tank



section through water tanks of two different clusters and their connections to the community water tank



section through community water tank, cluster water and Individual water tank; Overall Connections



Section through plinths and individual water tank

STUDIO V-VI

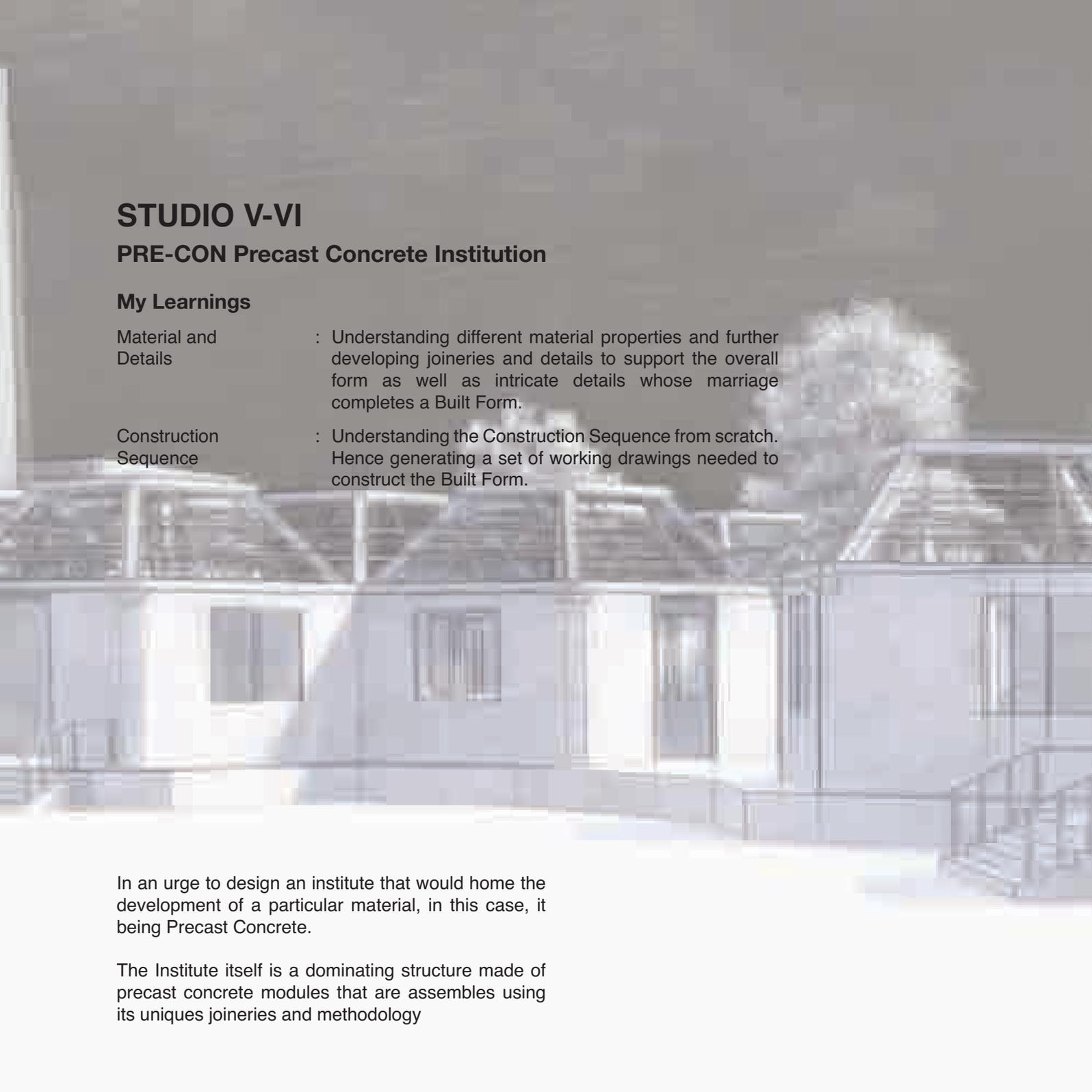
PRE-CON Precast Concrete Institution

My Learnings

- Material and Details : Understanding different material properties and further developing joineries and details to support the overall form as well as intricate details whose marriage completes a Built Form.
- Construction Sequence : Understanding the Construction Sequence from scratch. Hence generating a set of working drawings needed to construct the Built Form.

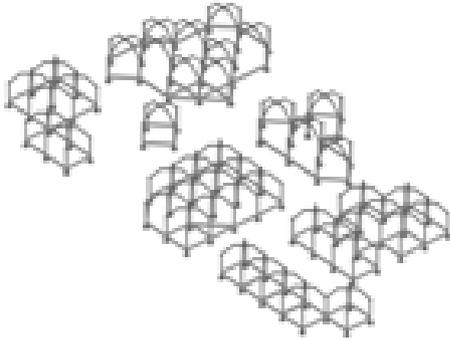
In an urge to design an institute that would home the development of a particular material, in this case, it being Precast Concrete.

The Institute itself is a dominating structure made of precast concrete modules that are assembled using its unique joineries and methodology

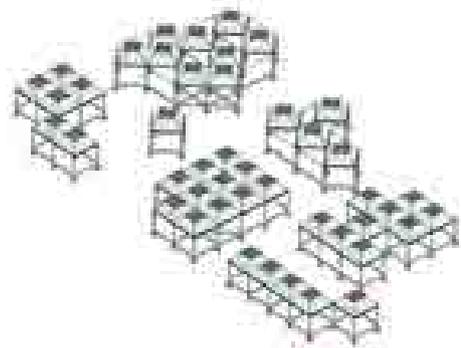




The program is about how the institute works in the development and understanding of the material. Not so formal in its character yet a discipline that governs the relationship between the architects and the artisans and sometimes even students.



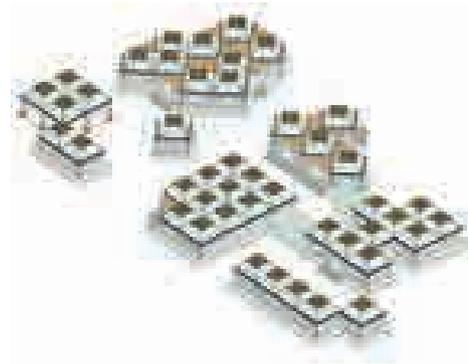
Creating a skeleton.
Deriving Hierarchy.
Positioning and Potential Mapping.



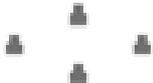
The play of mass and void.
Scaling Modules.
Different ways of Repetition.



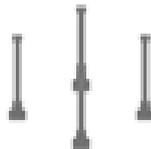
Creating a Journey a way of flowing
through spaces.
Marking the Points of Entry



Bringing in activities that induce the need
of different quality of spaces and hence
controlling the same using the infill walls and
fenestrations within.



Foundation



Column



Tie Beam



Inclined Member

Site and Context



Roof Member



Roof Wood Panels



Glass Infill

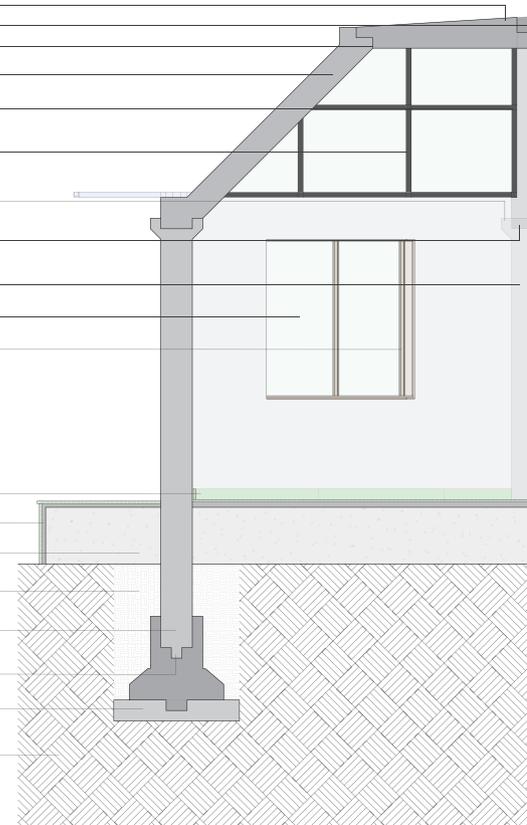


Plinth and Walls

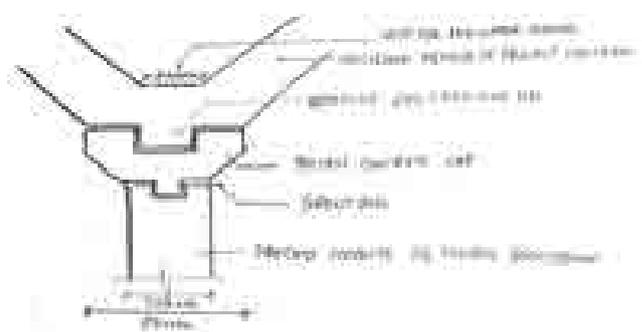
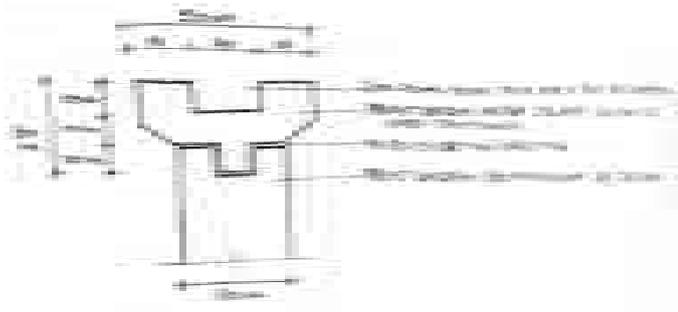
- Precast Concrete Spanning Member
- Notch for Second or Crossing Spanning Member to sit
- Notch for Spanning Member to sit on the Inclined Member
- Precast Concrete Inclined Member
- 50mm x 50mm Solid Wood Section Bolted on Inclined Member
- 50mm x 50mm Solid Wood Section between Two Inclined Member
- Precast Column Cap 500mm x 500mm (Outer to Outer Dimension)
- 300mm x 100mm Notch for the Inclined Member to sit on the Column Cap
- 300mm x 300mm Precast Column
- 24mm Double Glazed Unit Toughened Glass
- Wooden Window Frame

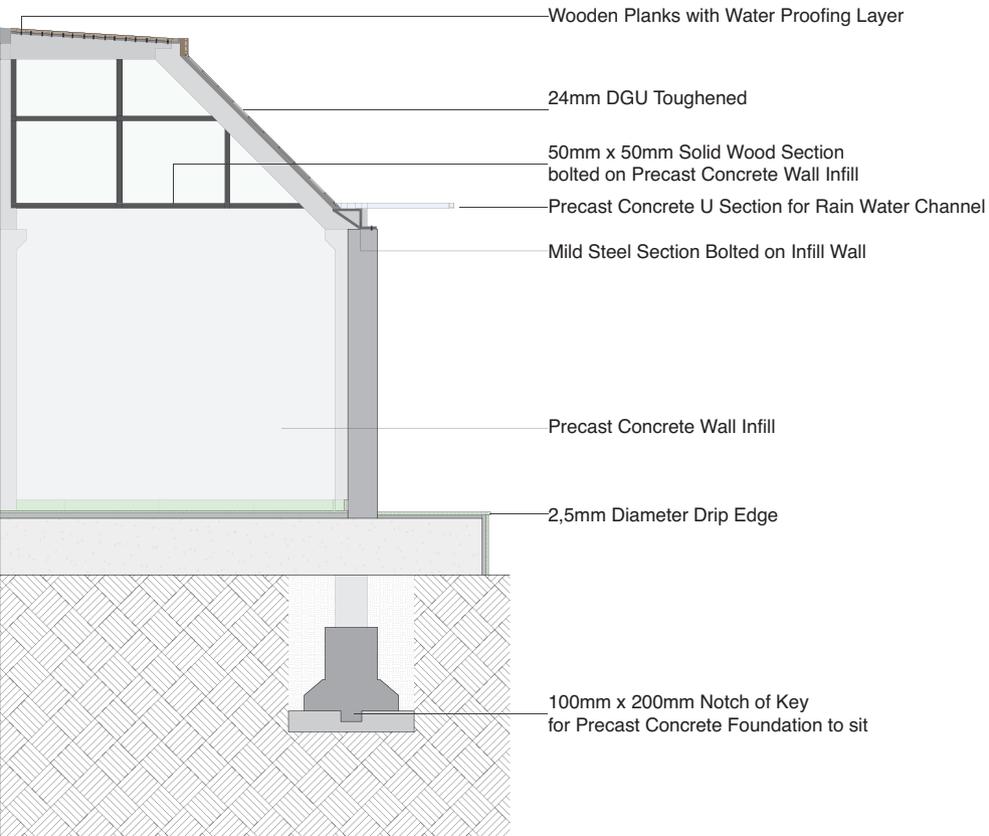
- 10mm Skirting of 25mm Thick Kota Stone
- 40mm Dry Mortar Bed
- 600mm Plinth
- Backfill of River Sand
- 300mm x 300mm Notch for the Precast Concrete Column to sit
- 100mm x 100mm Notch or Key for Column to sit
- 100mm Plain Cement Concrete

Natural Earth

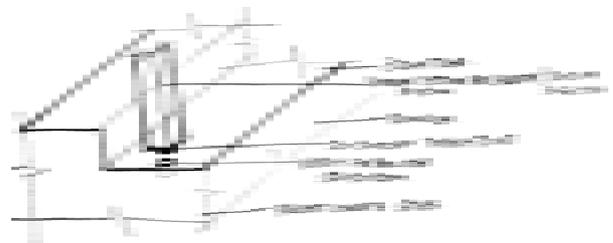
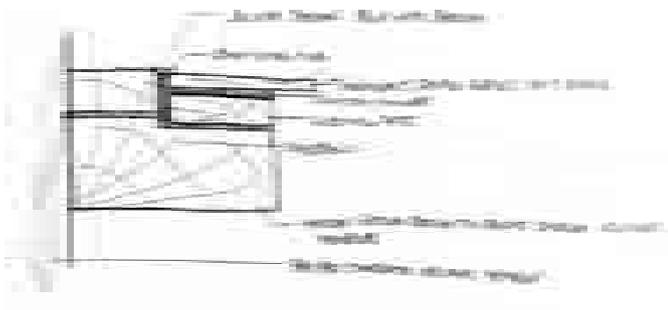


Sectional





Details

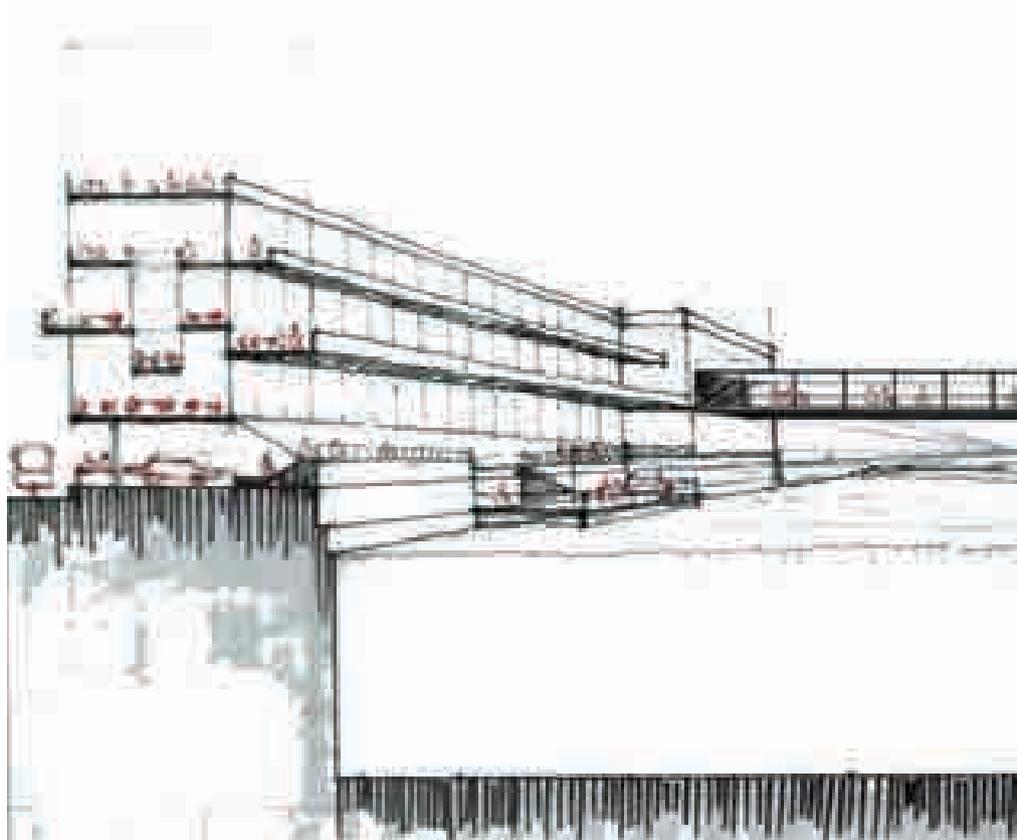


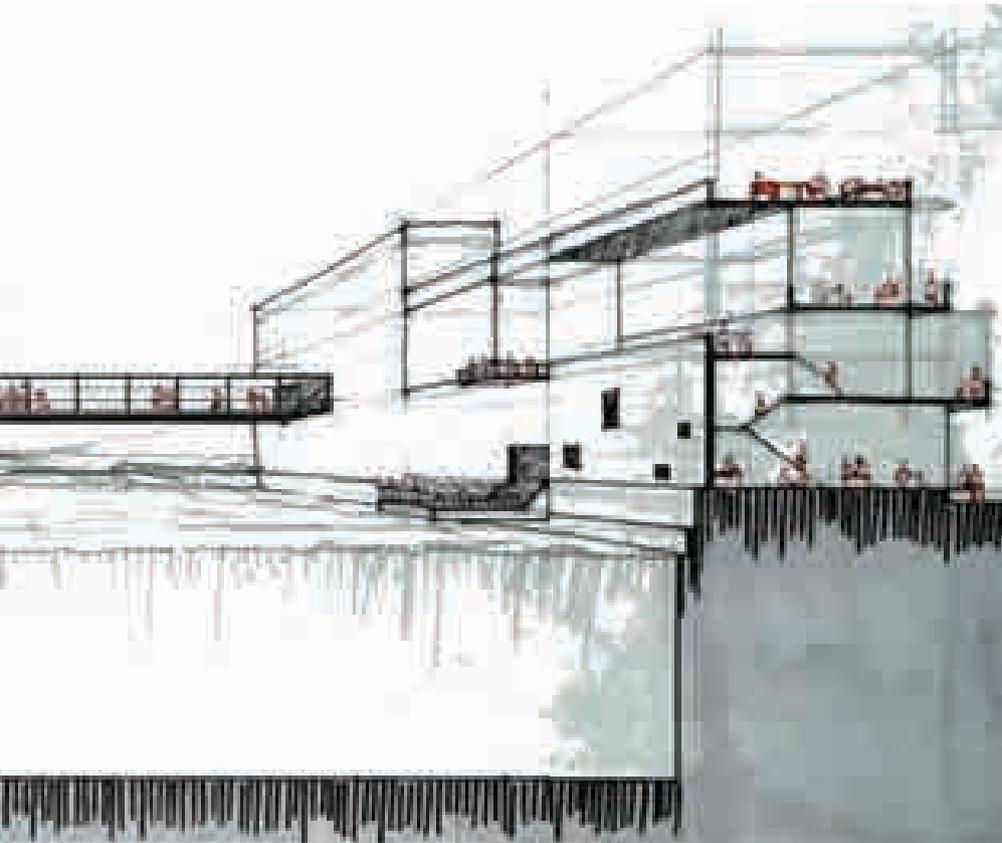
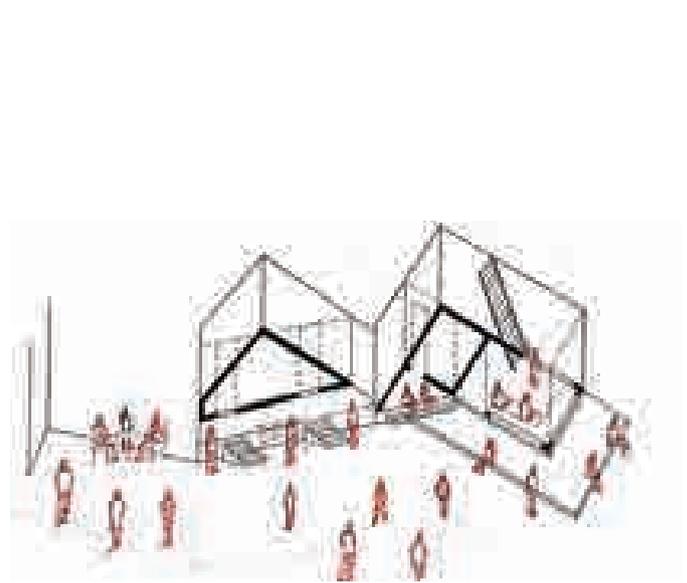
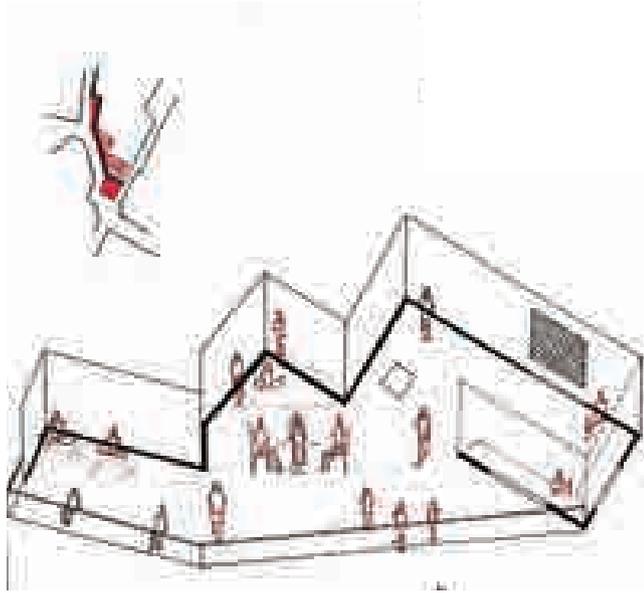
STUDIO VIII - IX

Urban Insert

My Learnings

- Urban Context : Studying and further developing an understanding of all the built and natural features along with social and environmental factors of a designated area.
- Urban Insert : Observing and Inferencing from the Urban Context leading to a Proposal born out of the very area of study. The Proposal being a reflection of understanding the Urban Context.



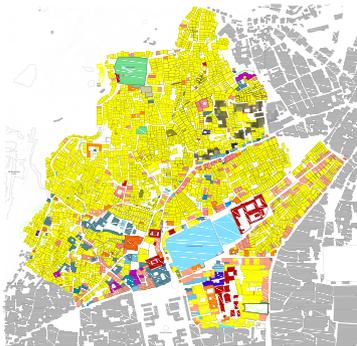


Understanding the topography, climate and the cultural aspects and further intervene a project within the walled city by understanding its grains, generating activity maps, tourists movements and to relate to the overall context of the city

Site



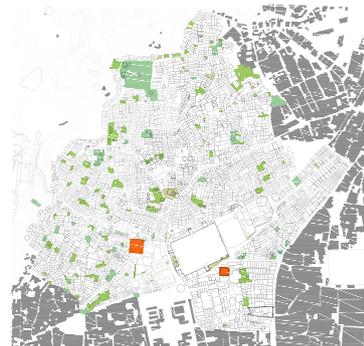
Base Map with Site Demarcation



Building Use

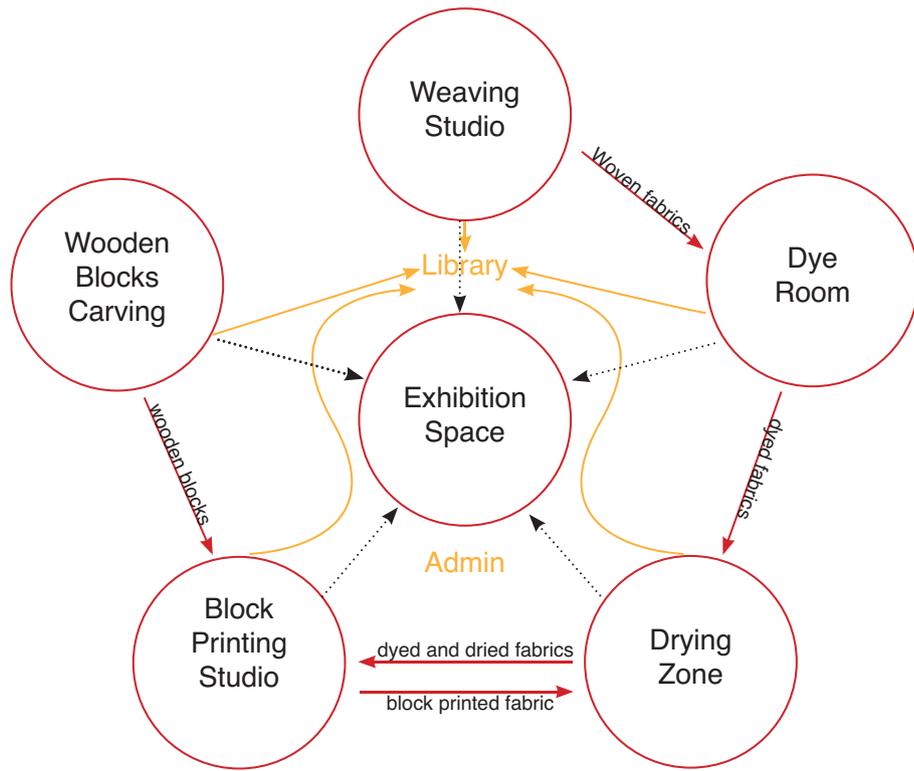


Street Connections

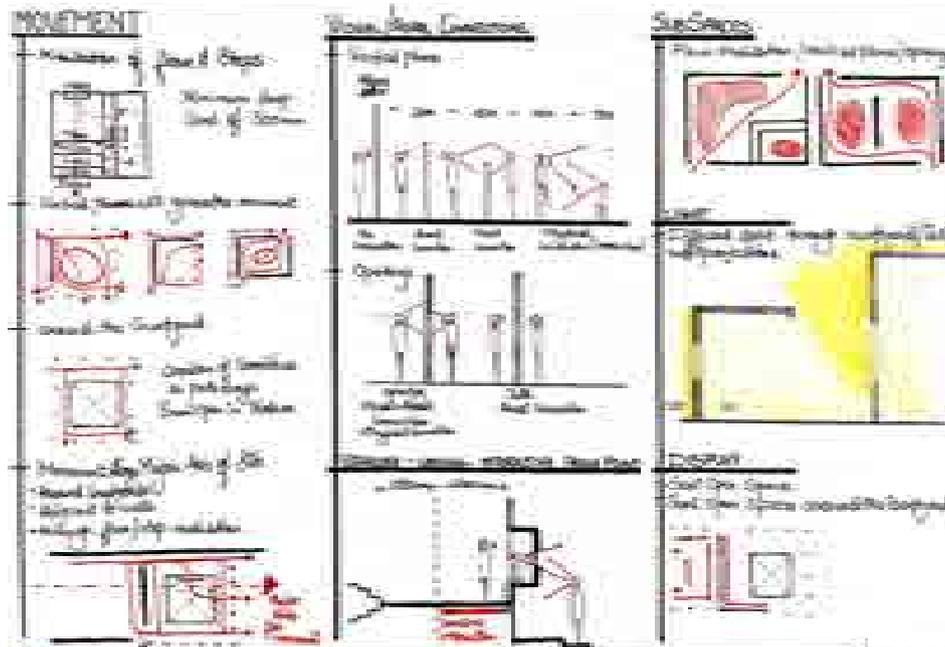


Open Space Usage

Program Interdependency



Parameters



Program

NART- Native Arts - Fabric Arts

The program is a Human Library that Teaches, makes and develops, and exhibits native arts of Jodhpur particularly related to Fabrics and namely Extra-Weft Weaving and Block Printing



IDEA
Intuitive Designs and Enquiring Architecture

LEVEL I

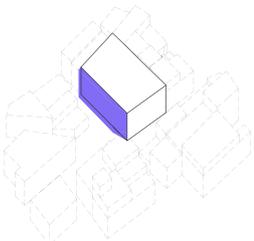
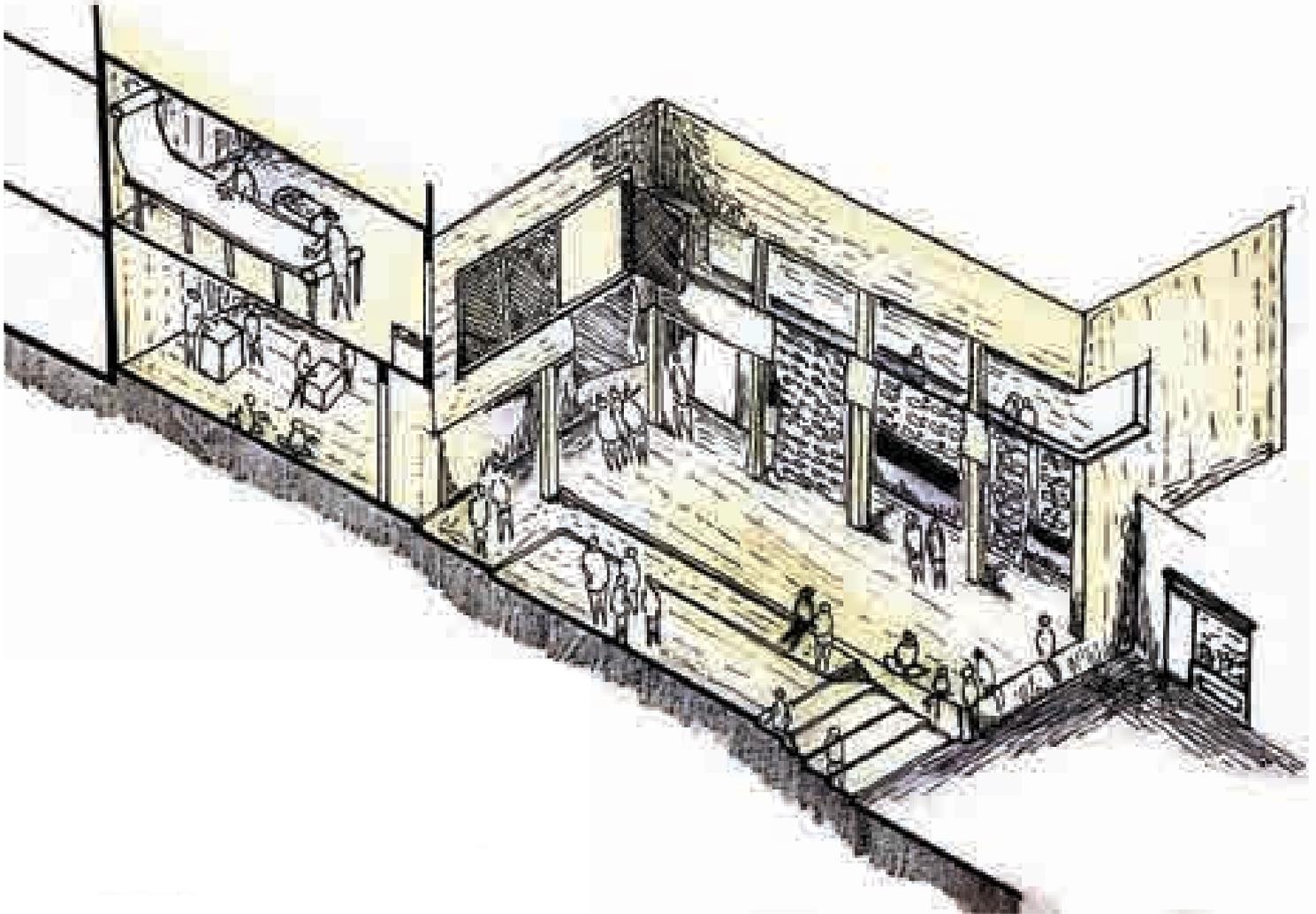
LEVEL II

LEVEL III

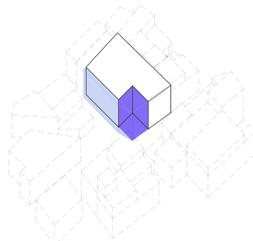
OVERALL



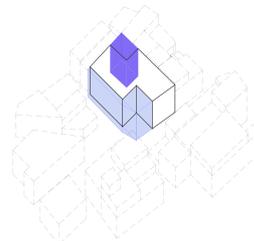
Concept Sketch



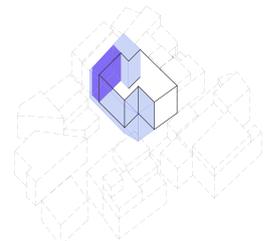
Responding to street edge



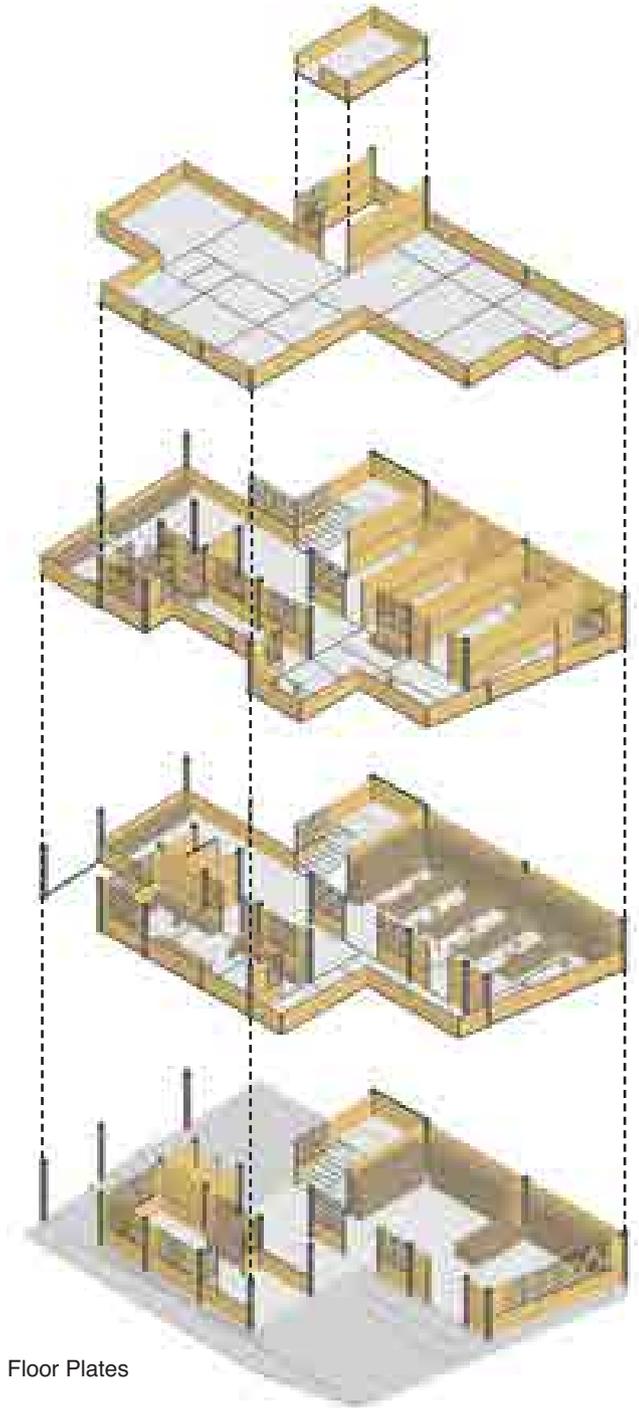
Plaza - Extention of public open space



Shared walls - A courtyard on the corner



A direct connection - street to courtyard



Floor Plates



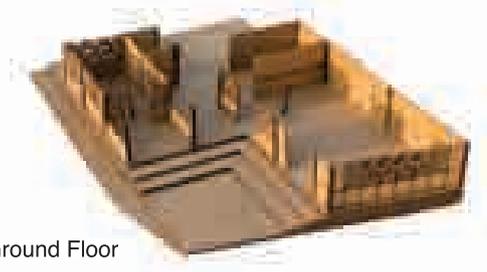
Overall



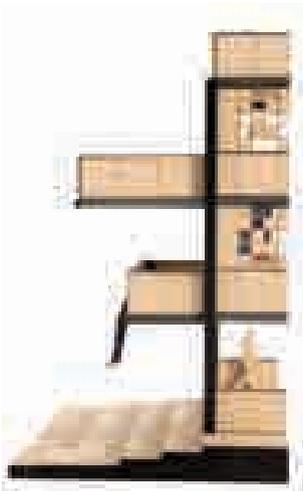
Second Floor



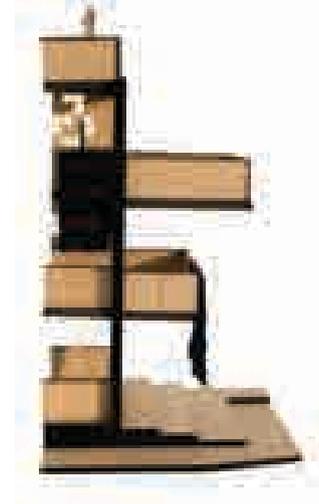
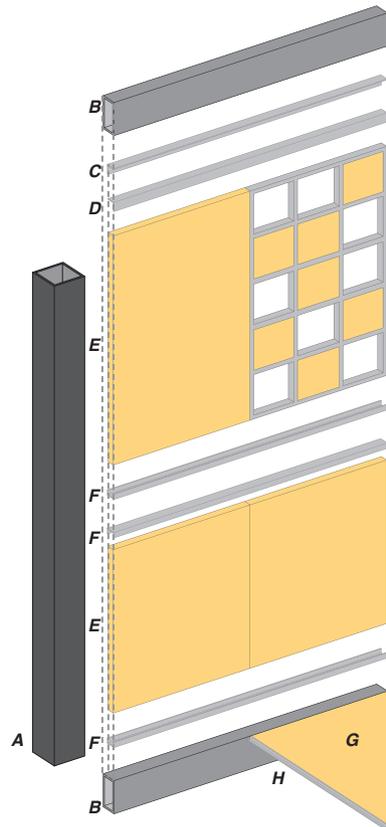
First Floor



Ground Floor

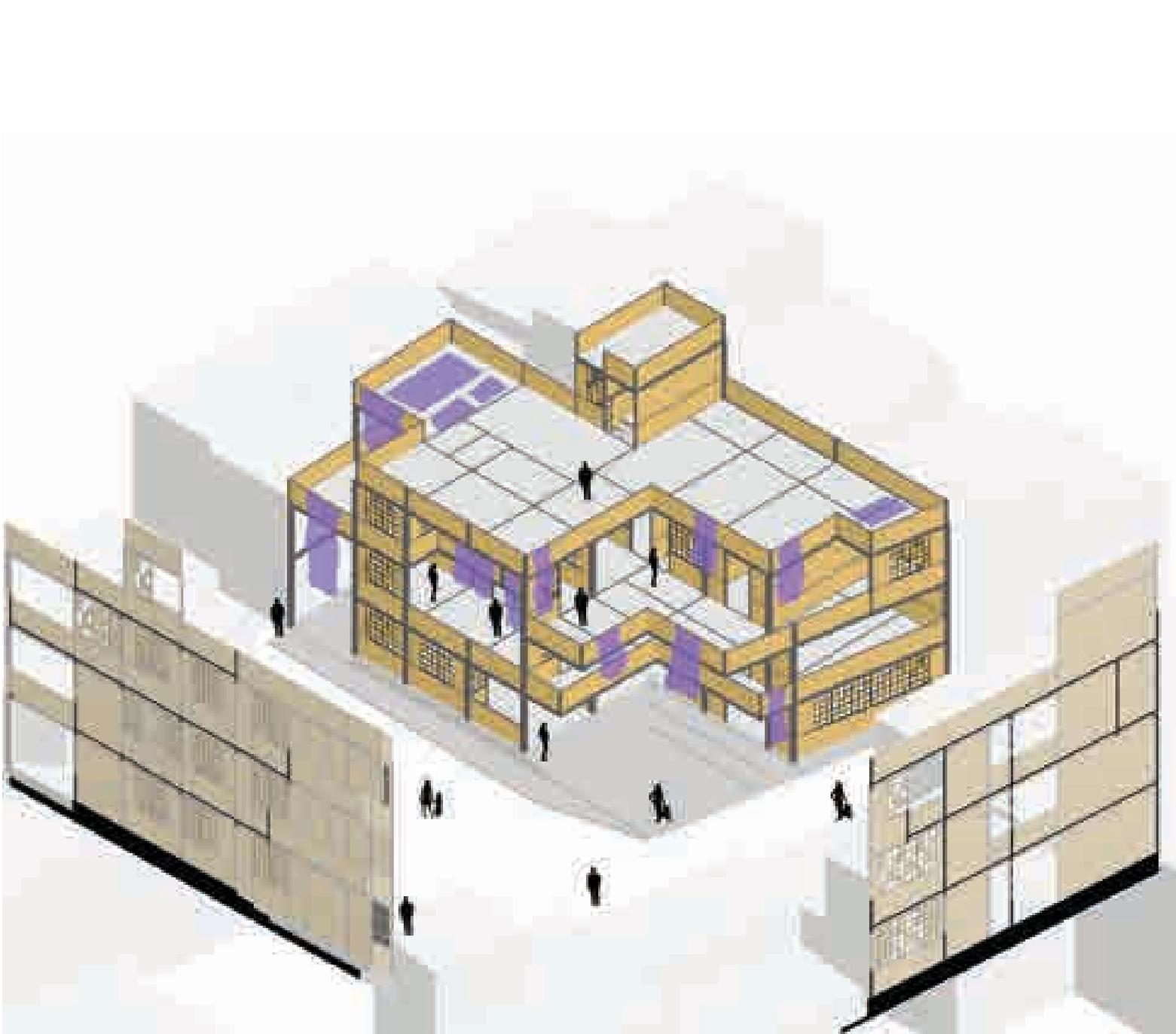


Wall Sectional Model



- | | | |
|---|------|-----------------------------|
| A | 12mm | thick SHS - 200 x 200mm |
| B | 12mm | thick RHS - 100 x 200mm |
| C | 05mm | thick L angle - 60 x 60mm |
| D | 04mm | thick L angle - 55 x 55mm |
| E | 50mm | stone wall infill |
| F | 6mm | thick C section - 63 x 32mm |
| G | 25mm | stone flooring |
| H | 6mm | thick T section - 24 x 31mm |





Isometric View

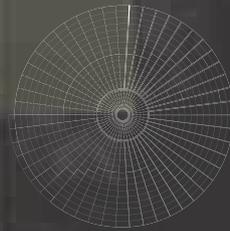
A Manual to R.E.A.D Architecture in Literature



My Learnings

Architecture and Beyond : Core idea was to pick a topic that goes beyond the physical built part of architecture.

Labyrinth : Taking a Labyrinth in the form of textual space as a case study and further developing a Designed - Research Thesis in the form of a Labyrinth.



Studio X

**“The end is the beginning, and
the beginning is the end”**

0. This is a Design Thesis, developing an understanding of a textual space and further creating a textual labyrinth, the Thesis.

Site: The size of a page is the required frame of space. The constraints of the dimensions of the page are the parameter to keep in mind while designing the textual spaces.

Program: A Manual to READ architecture in Fiction/Literature.

Concept: Singularity of Experiencing a space; a labyrinth.

Material Palette:

Typography

- A. The main text containing the elements and gestures are in Helvetica
- B. The supporting elements of the story arc are in Dante
- C. Citation and references being the supplementary to the main text are also in Dante
- D. The footnotes are in Bookman Old Style.

Design Decisions:

1. The Thesis is a Labyrinth comprising of several fragmented labyrinths. The Thesis has its own Method of Study and an orthographic nature to mediate this labyrinth in the form of textual spaces. These textual spaces are the frames of spaces where the activities reside.
2. Chapters, all are parts of the overall field but an overall field itself. Each chapter is designed as a Labyrinth but this time of a non orthographic nature. Rather the chapters reside within the textual spaces and frames of spaces that are fragmentary in nature. This fragmentary approach of the spaces makes the reader go back and forth several times in the Labyrinth. The struggle and motion of turning of frames creates the frames per second motion and defines the Labyrinth.
3. The Creation of field, the field being the totality and the totality being different at different points within the textual spaces of the Thesis. The initial textual spaces are the ones taken up from the book House of Leaves, further the textual spaces of the Thesis itself are also decoded in a similar manner.
4. The diagrammatic representation of the contents of the labyrinth is not just an interpretation but more of a singular experience of the reader of House of Leaves. This is the point where depth is introduced in the frame of space. Overcoming the constraints of a Two Dimensional frame of space, a page, depth is being added through the use of a portal and to achieve this portal design principles like mirroring and constant change in the orientation of text and illustrations are used, this also brings out the textual deformation which is a direct inference of the case study: House of Leaves
5. Each chapter has a set of supplementary material, a tertiary space that actually acts as the primary one as in the loop of creation comes first. This supplements the creation of the Thesis and also gives the origin to the illustrations and narratives of the space.
6. The Thesis has its own set of annexures, supplementary material that guides and governs the design of the Thesis.

0. This is a Design Thesis, developing an understanding of a textual space and further creating a textual layout, the Thesis.
- Site: The size of a page is the reduced frame of space. The constraints of the dimensions of the page are the parameter to keep in mind while designing the textual spaces.
- Program: A Manual to READ architecture in Fiction/Literature.
- Concept: Singularity of Experiencing a space; a layout.
- Material Palette:
- Typography
- A. The main text containing the elements and gestures are in Helvetica
- B. The supporting elements of the story arc are in Dante
- C. Citation and references being the supplementary to the main text are also in Dante
- D. The footnotes are in Bookman Old Style.

Design Decisions:

1. The Thesis is a Layout comprising of several fragmented layouts. The Thesis has its own Method of Study and an orthographic nature to mediate this layout in the form of textual spaces. These textual spaces are the frames of spaces where the activities reside.
2. Chapters, all are parts of the overall field but an overall field itself. Each chapter is designed as a layout but this time of a non orthographic nature. Rather the chapters reside within the textual spaces and frames of spaces that are fragmentary in nature. This fragmentary approach of the spaces makes the reader go back and forth several times in the layout. The struggle and motion of turning of frames creates the frames per second motion and defines the layout.
3. The Creation of field, the field being the totally and the totally being different at different points within the textual spaces of the Thesis. The initial textual spaces are the ones taken up from the book House of Leaves, further the textual spaces of the Thesis itself are also decoded in a similar manner.
4. The diagrammatic representation of the contents of the layout is not just an interpretation more of a singular experience of the reader of House of Leaves. This is the point where depth is introduced in the frame of space. Overcoming the constraints of a 2D dimensional frame of space, a page, depth is being added through the use of a portal and to achieve this portal design principles like mirroring and constant change in the orientation of text and illustrations are used, this also brings out the textual deformation which is a direct inference of the case study: House of Leaves
5. Each chapter has a set of supplementary material, a tertiary space that actually acts as the primary one as in the loop of creation comes first. This supplements the creation of the Thesis and also gives the origin to the illustrations and narratives of the space.
6. The Thesis has its own set of annexes, supplementary material that guides and governs the design of the Thesis.

**“The end is the beginning, and
the beginning is the end”**

Work Experience

banduksmithstudio

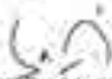


design @banduksmithstudio in
300 words long, top right. At the end of the page, there is a small, faint text: "© 2017 Banduk Smith Studio. All rights reserved."

1 January 2018

Certificate of Training Completion

This is to certify that **Mr. Deep Varma** worked as a full time trainee architect in our firm, **banduksmithstudio**, for a total of **6 months**, starting from 15 June 2017.



Sachin Bandurwala
B.Arch
Architect & Partner.

banduksmithstudio

NOTE: The copyright for all the illustrations, drawings and documentation belong to the respective offices
The projects displayed ahead involved the author as an intern at the following firm

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| Sr. No. | Project | Set of drawings | No. of sheets |
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| 2 | Abhishree orchard | ground floor presentation sheet first floor presentation sheet | 1 1 |
| 3 | Azka | axonometric view presentation axonometric render | 6 1 |
| 4 | Jain terraces shreyas siddhichakra shrimay | solar panel drawings solar panel drawings solar panel drawings | 3 3 3 |
| 5 | khurana | light fixture details light fixture iso | 1 1 |
| 6 | mehta house | bathroom drawings | 3 |
| 7 | transchem biofiltes | model photographs | |

Saini House

House in Deesa



Site Plan



Daylight - Front View



Daylight - Back View



Night time - Front View



Night time - Back View

Nestled behind a buffer of vegetation from the national highway, is a residence designed for a potato farmer and his family. The protective house uses thick walls, insulated slab strategies, and smartly controlled openings to shield its inhabitants from the hot summer sun.

Abhishree Orchard



- 16 - Bedroom
- 17 - Toilet
- 18 - Terrace

1st floor
 Abhishree Orchard | 21.08.2017
bandukemistudio
 design@bandukemistudio.com

First Floor Plan



- 1 - Parking
- 2 - Churna tross
- 3 - Deck
- 4 - Entrance porch
- 5 - Living room
- 6 - Dining room
- 7 - Kitchen
- 8 - Common toilet
- 9 - Servants room
- 10 - Servants toilet
- 11 - Outdoor cooking space (covered)
- 12 - Bedroom
- 13 - Toilet
- 14 - Tree plantation
- 15 - Lawn

ground floor
 Abhishree Orchard | 21.08.2017
bandukemistudio
 design@bandukemistudio.com

Ground Floor Plan

Isometric view of Site



view I



view II

Azkka

Azkka Pharmaceuticals Pvt Ltd



Identified site in an office complex



demolition of highlighted walls



masonry work introduced



Keystone - elliptical conference room



defining spaces; insertion of cupboards

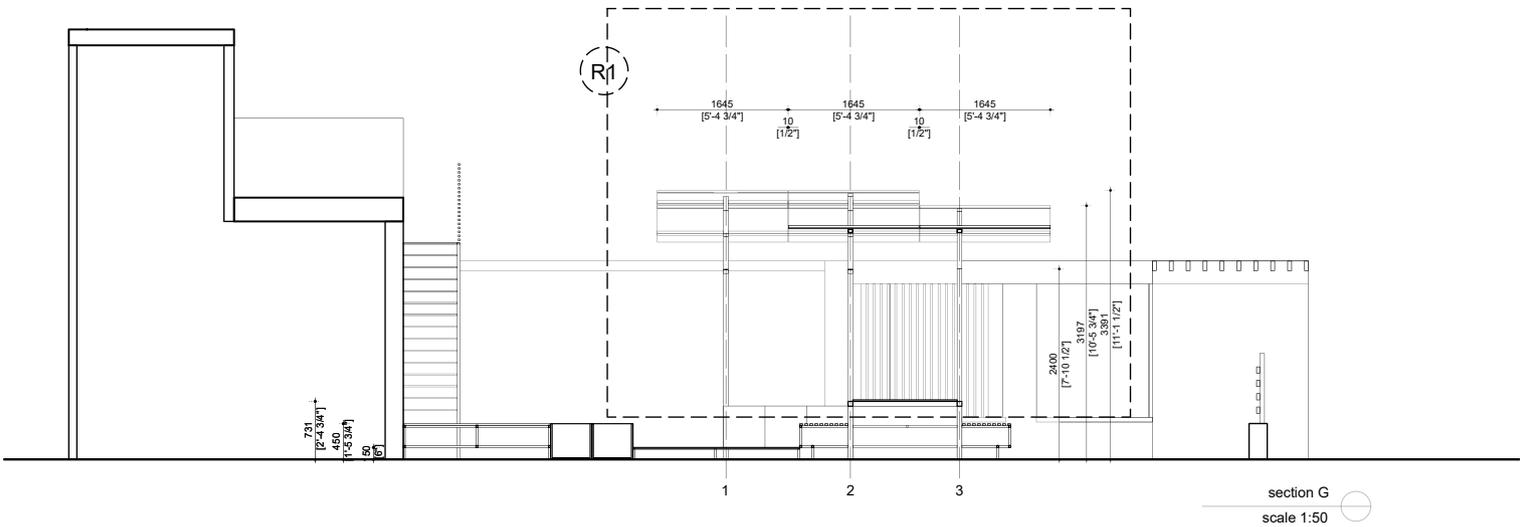
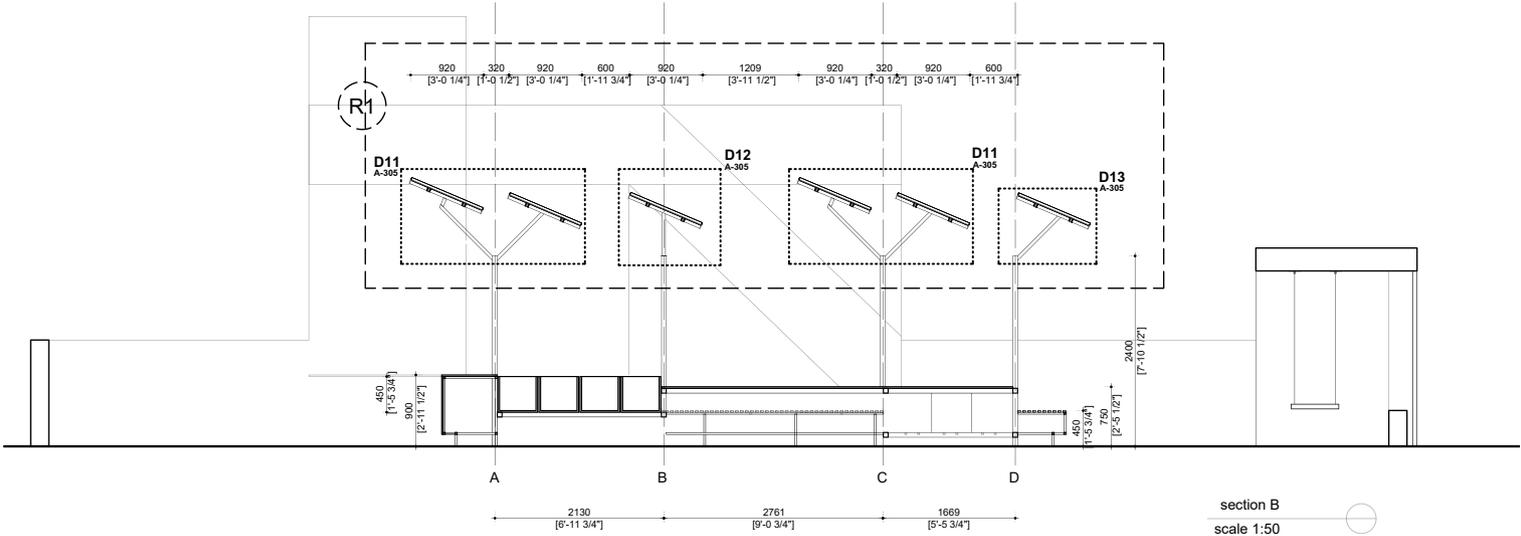


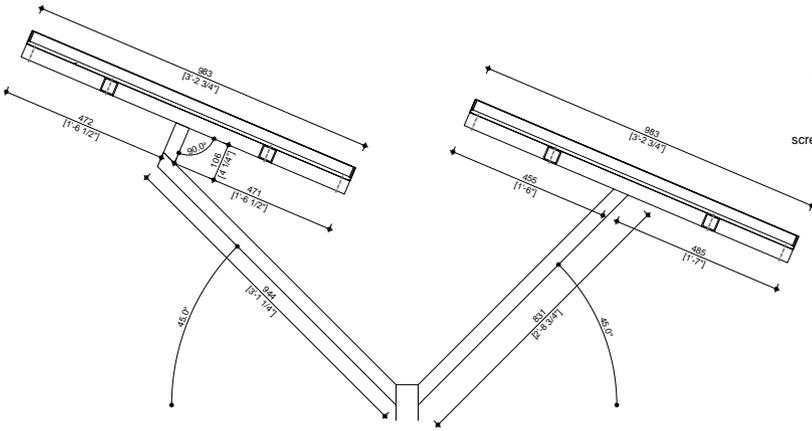
introduction of furniture; office interiors

Transchem Biofilters Model Making and Documentation

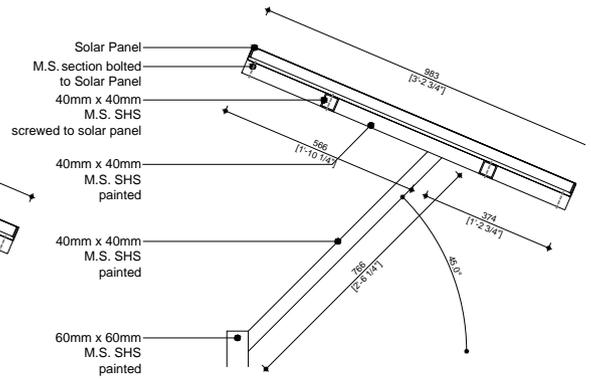


Jain Terraces Shreyas, Sidhichakra, Shrimay



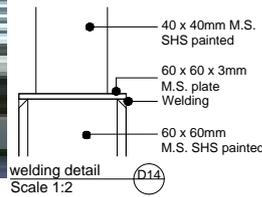
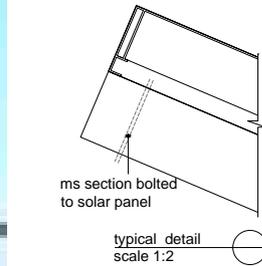


fixing detail
scale 1:10 (D11)

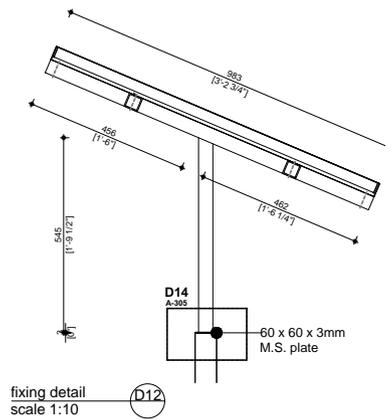


fixing detail
scale 1:10 (D13)

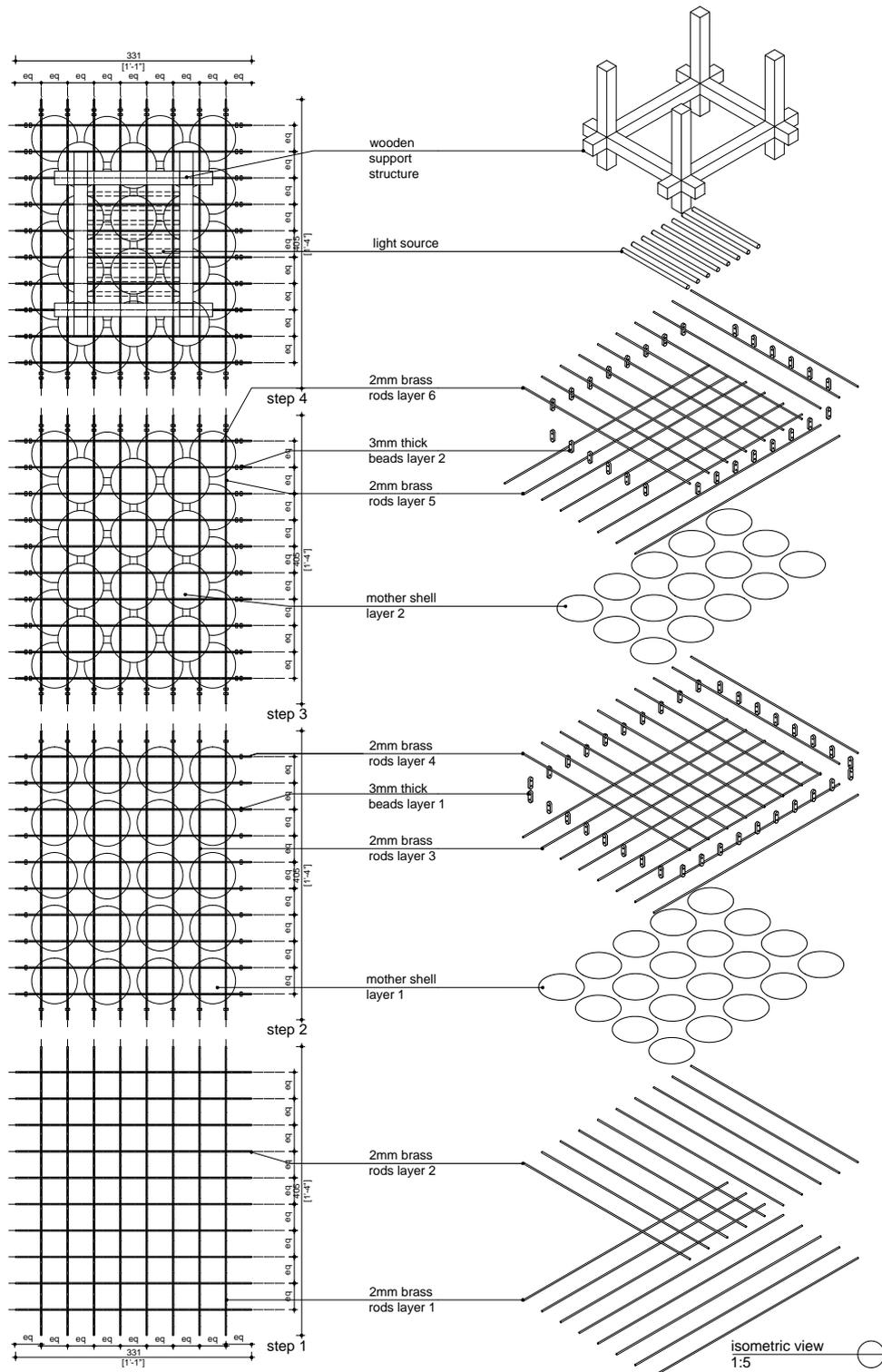
All the Solar panels are connected to their respective M.S. SHS at an angle of 23°



welding detail
Scale 1:2 (D14)



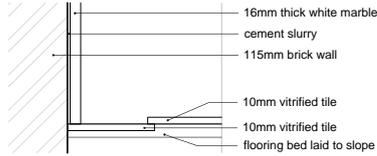
fixing detail
scale 1:10 (D12)



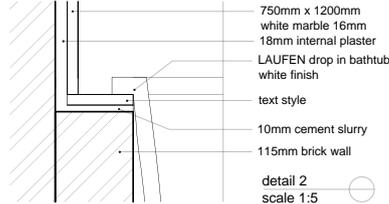
Mehta House Renovation

LEGEND

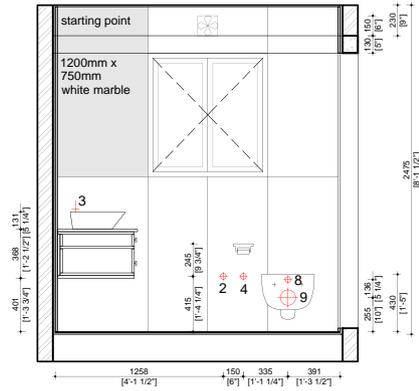
- 1 - angular valve (hot)
- 2 - angular valve (cold)
- 3 - wash basin faucet
- 4 - health faucet
- 5 - smart control mixture
- 6 - shower head
- 7 - 5 hole bath combination
- 8 - water supply tap
- 9 - soil waste outlet
- 10- waste water outlet



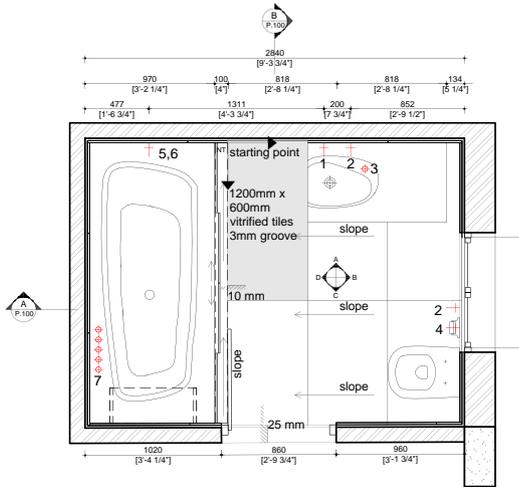
detail 1
scale 1:5



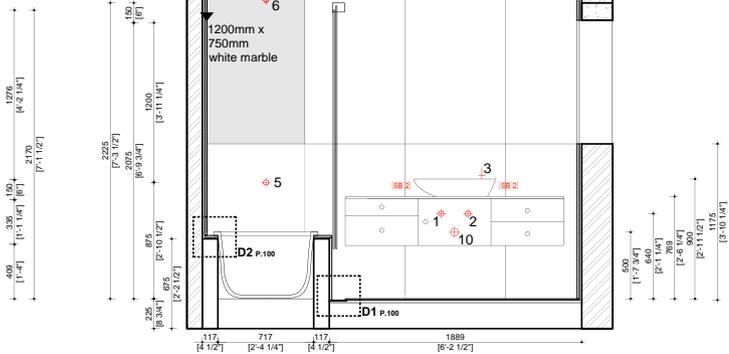
detail 2
scale 1:5



section B
scale 1:25



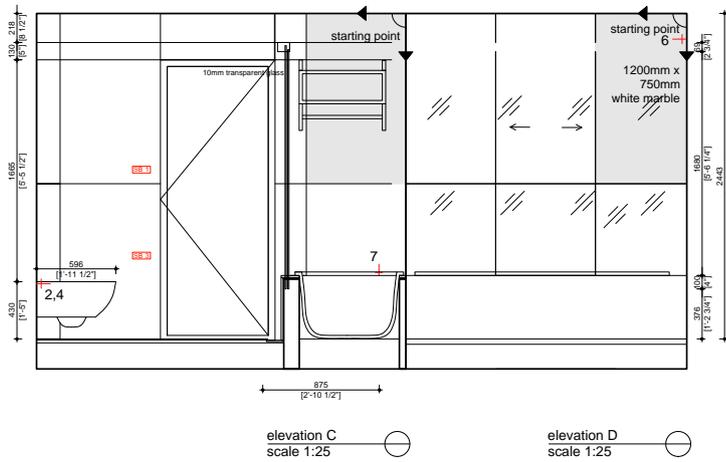
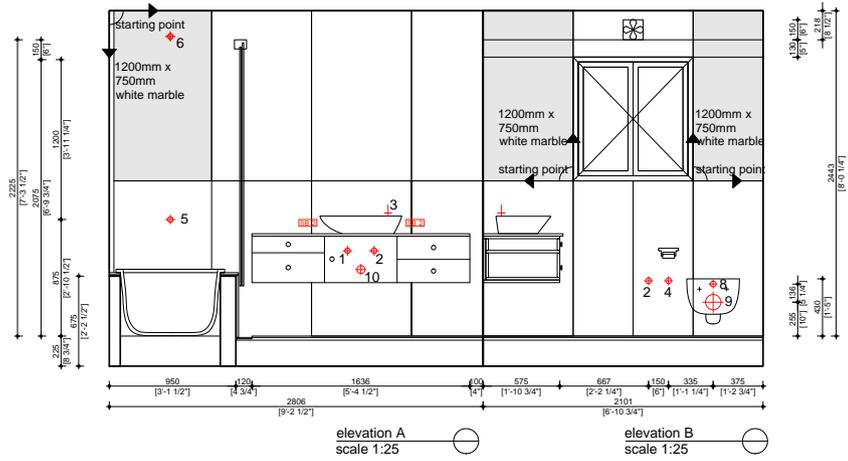
bathroom layout
scale 1:25



section A
scale 1:25

LEGEND

- 1 - angular valve (hot)
- 2 - angular valve (cold)
- 3 - wash basin faucet
- 4 - health faucet
- 5 - smart control mixture
- 6 - shower head
- 7 - 5 hole bath combination
- 8 - water supply tap
- 9 - soil waste outlet
- 10- waste water outlet



Work Experience

&teak - Junior Designer - Full Time



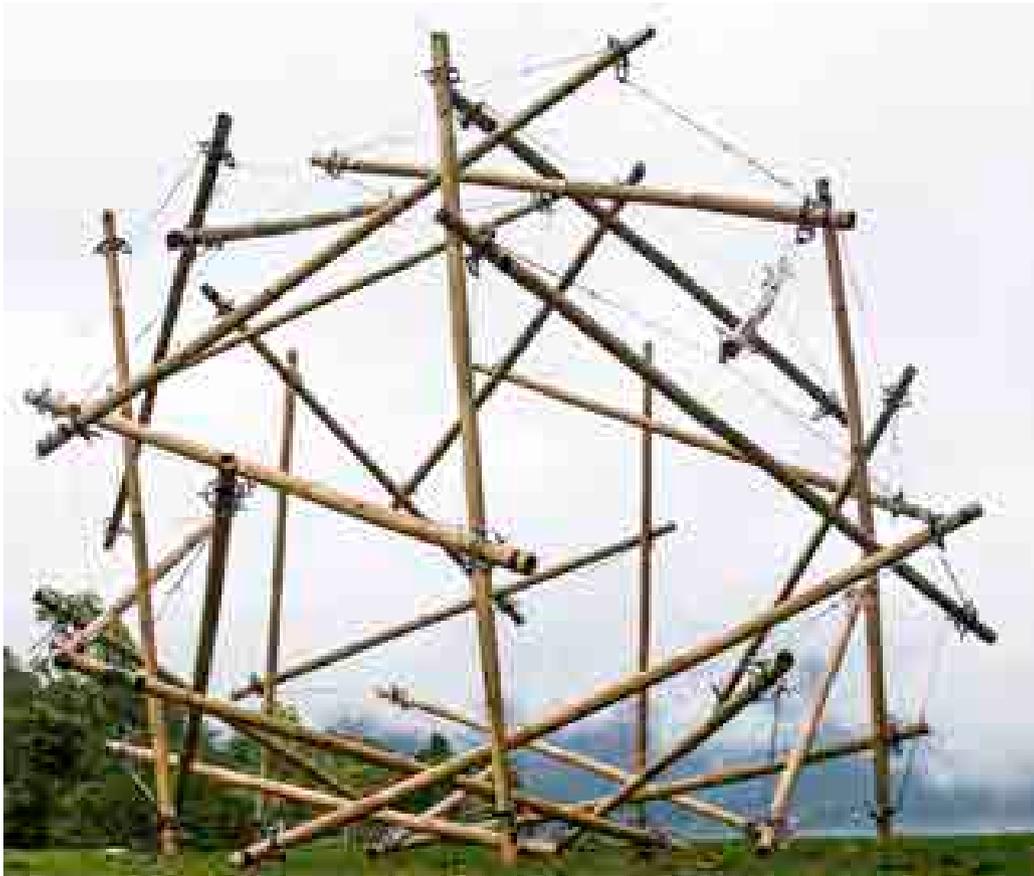
Workshop

Bamboo Workshop

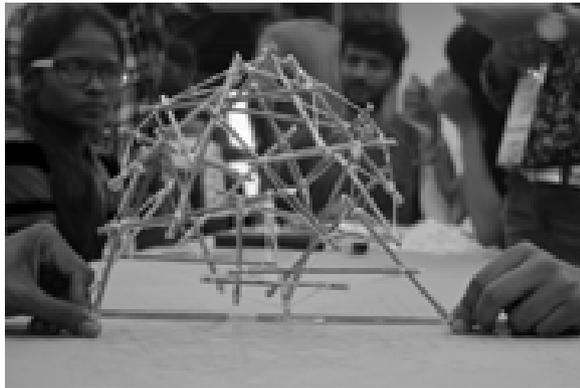


Workshop

Poetics of Bamboo; Tensegrity - Bali, Indonesia



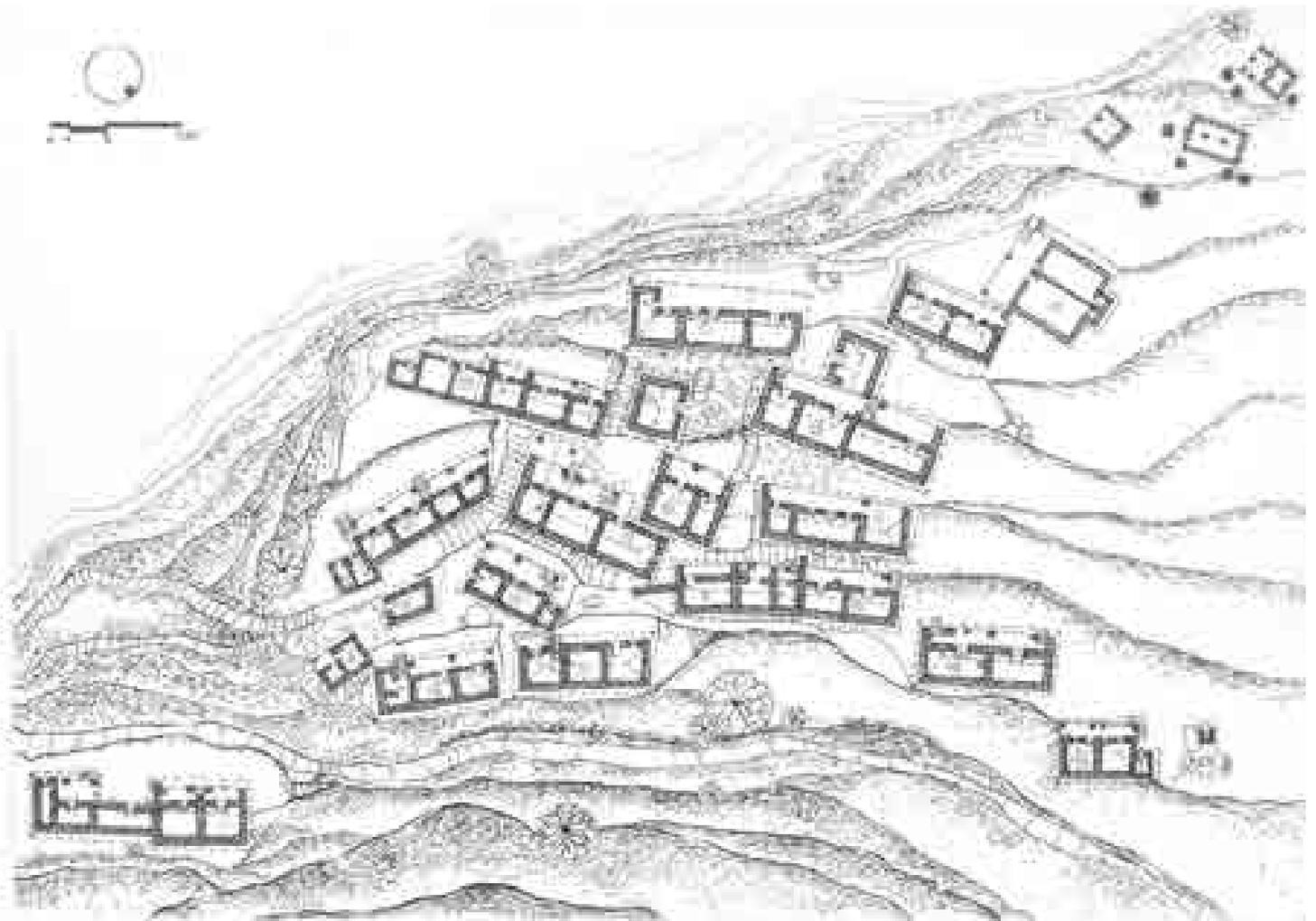
Tensegrity is a design principle that applies when a discontinuous set of compression elements is opposed and balanced by a continuous tensile force, thereby creating an internal Pre-stress that stabilizes the entire structure.



Workshop

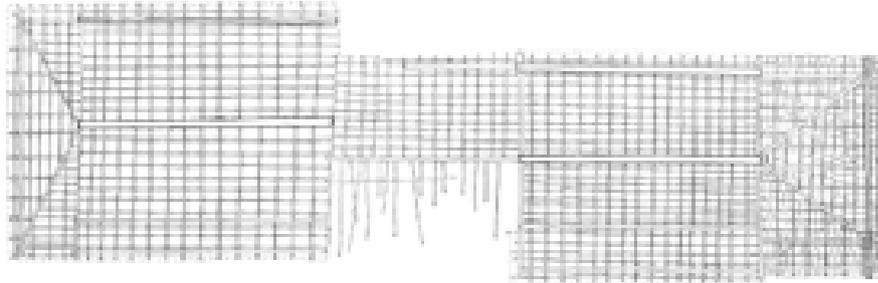
Narratives of Naddi and Bal, Himachal Pradesh

This is a related study project that took place in Himachal Pradesh. Over 65 houses were documented that made three clusters of Naddi Village. Further, the village of Bal was also documented. The key feature of documentation is that all the drawings are free hand.

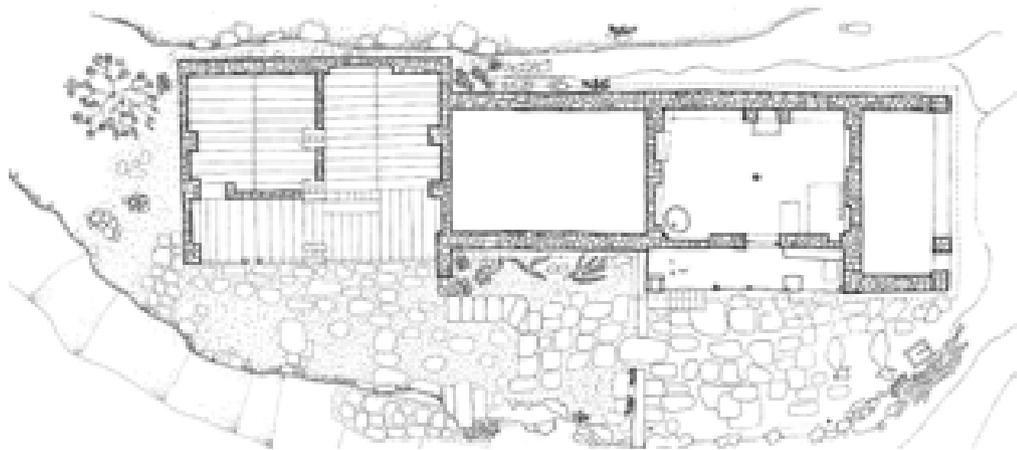


Site Plan

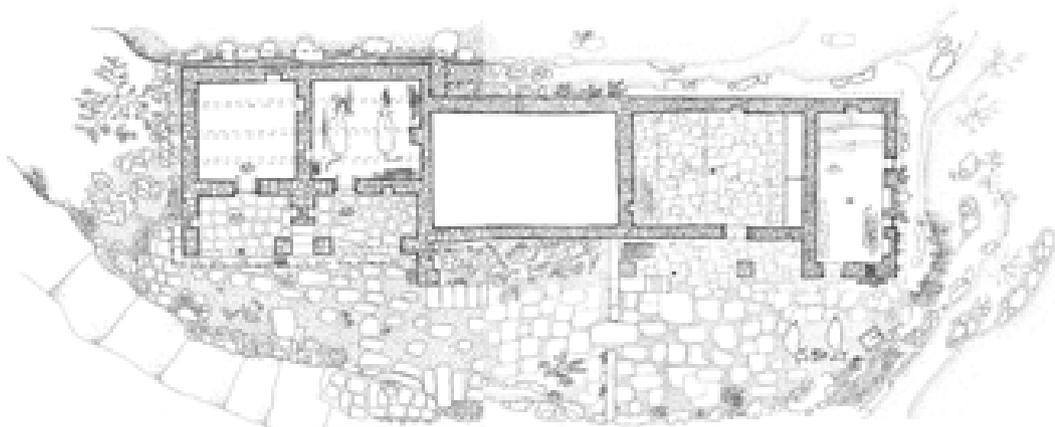
Roof Level plan

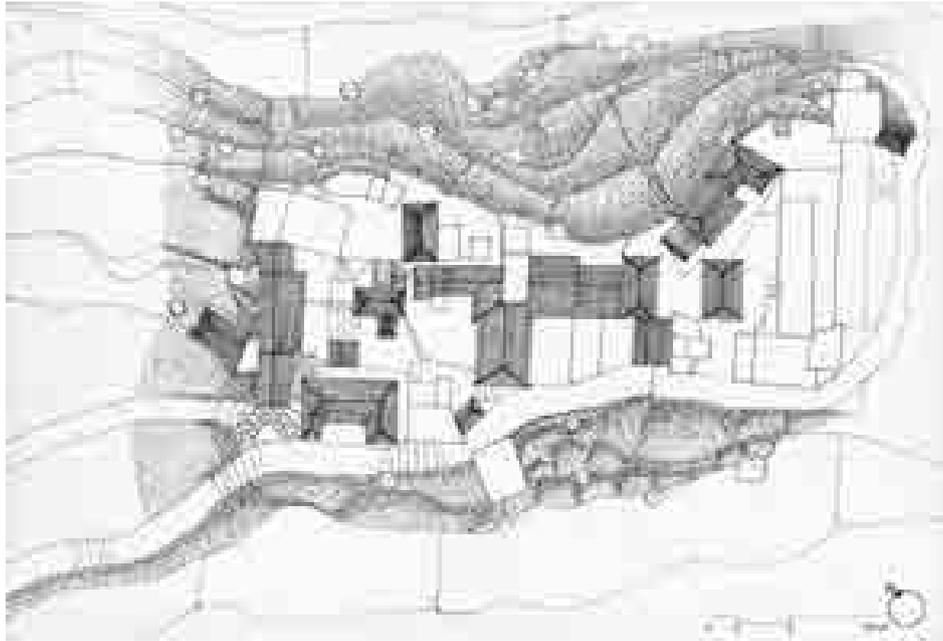


Second Floor Plan



Ground Floor Plan

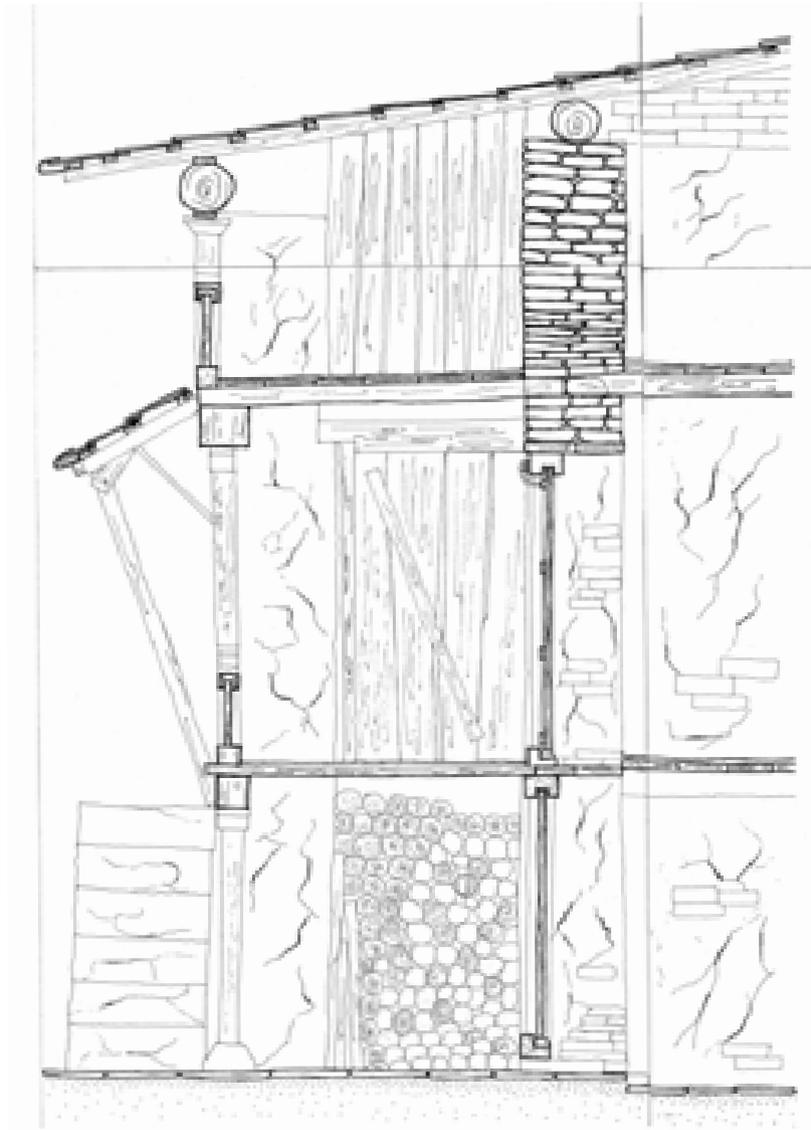




Roof Level Plan



Ground Level Plan



Section - Joineries and Details