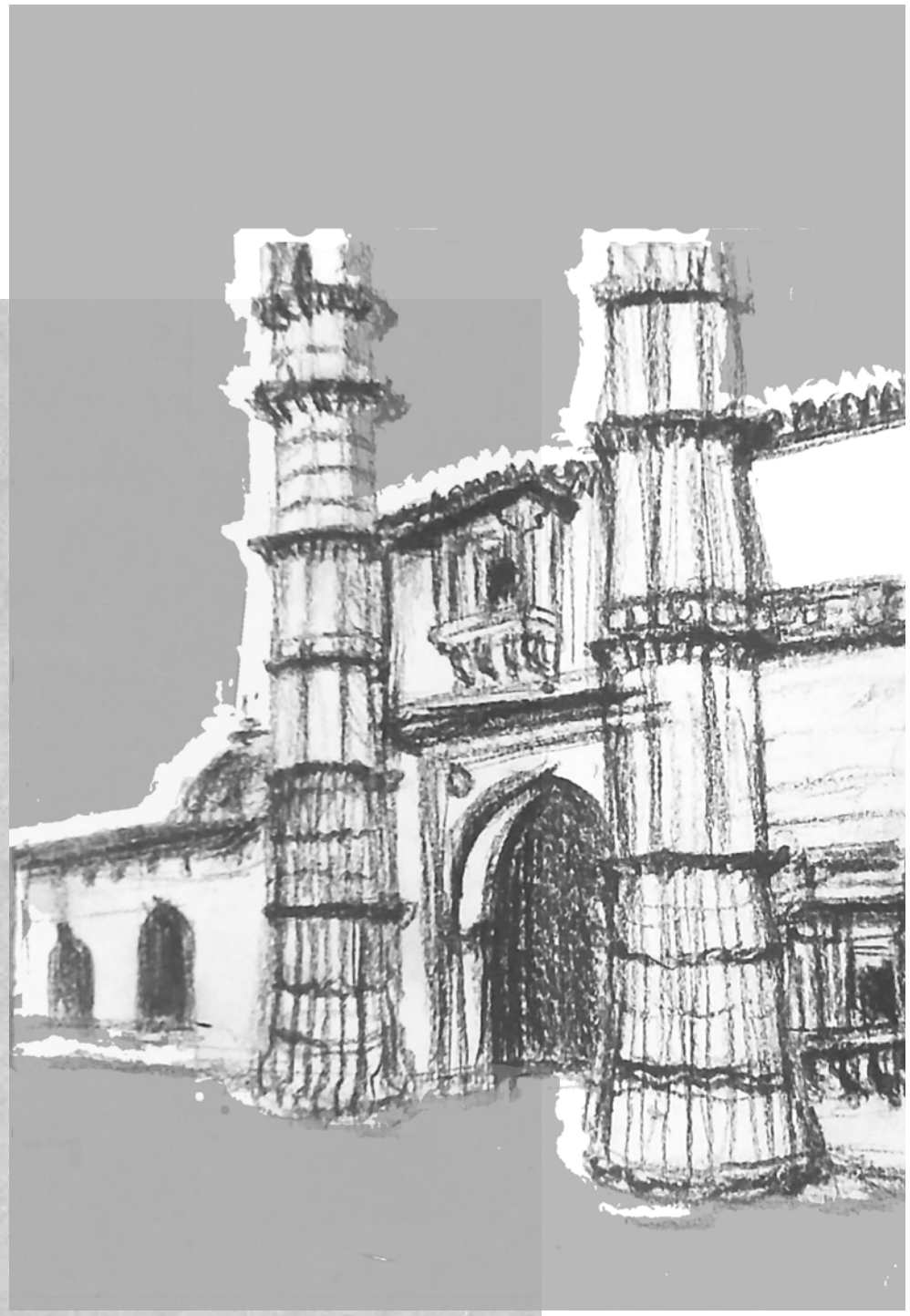

Portfolio

Anokhi Brahmbhatt
CEPT University

CURRICULUM VITAE

ANOKHI BRAHMBHATT
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CEPT UNIVERSITY
AHMEDABAD

SEMESTER 6
SCHOOL OF ARCHITECTURE

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LANGUAGES
ENGLISH
HINDI
GUJURATI

EDUCATION

School
Jai Ambe Vidhyabhavan
Valsad, Gujurat

Bachelor in Architecture
CEPT University
(Completed 3rd yr)

DIGITAL SKILLS
AUTOCAD
Sketch up
Adobe Photoshop
Adobe Indesign
Adobe Ilustrater
Microsoft Powerpoint
Microsoft Excel

HAND SKILLS
Drafting
Sketching (Water colours, Charcoal, Pen, Ink)
Model making (Board, Thermocol,papers, MDF, Acrylic)
Rendering

INTERESTS
Rendering
Sketching

This portfolio contains my all over work of six semesteres which reflects more of my interst and my imagination through it.

CONTEXT

SEMESTER 1 AND 2
Foundation Program

SEMESTER 3
SEWA : Moving with the time, Staying with the Spirits.

SEMESTER 4
(Co)production: Designing With People

SEMESTER 5
STUDIO A TO O (Working Drawing Studio)

SEMESTER 6
Making living Spaces

SUMMER SCHOOL - 2019
Planning and design of confined masonary building in Earthquake prone area of India

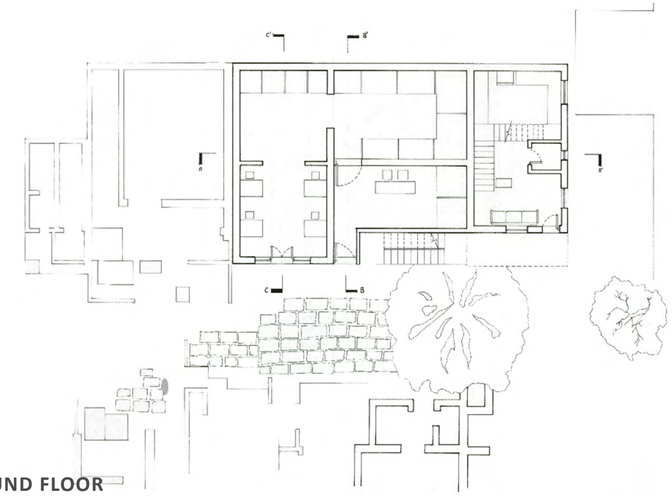
RELATED STUDY PROJECT (RSP) 2016
Houses of Divar Island, Goa

SEMESTER 1

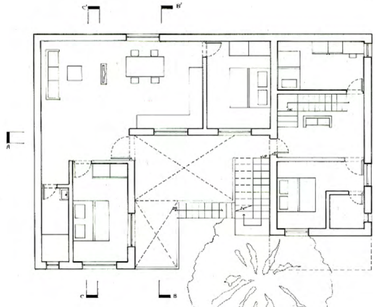
PROGRAMME:
House for 4

SITE :
Mithakhali,Ahmedabad

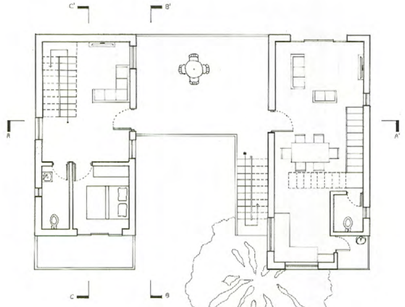
BRIEF :
This group project was to design a house for 4 brothers in the Mithakhali area of Ahmedabad. The main challenge was to design in group where each student has to design a house for one brother.



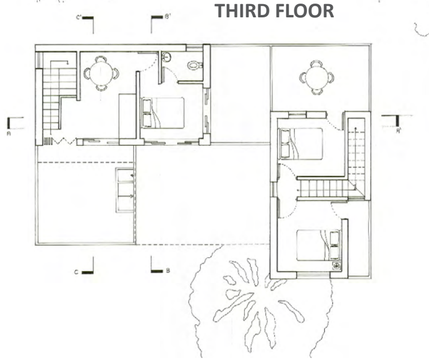
GROUND FLOOR



FIRST FLOOR



THIRD FLOOR



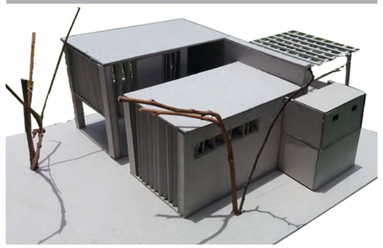
SECOND FLOOR

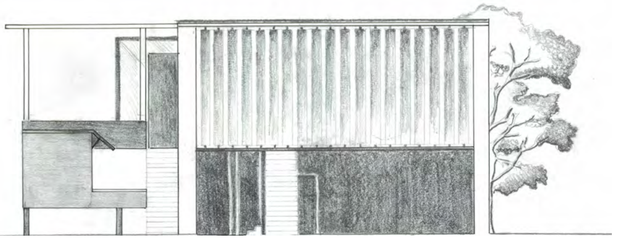
SEMESTER 2

PROGRAMME :
A place for lovers of Art

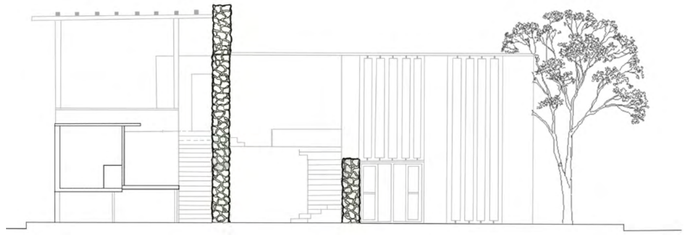
SITE :
Outskirts of the Ahmedabad city

BRIEF :
The foundation studio was more foucused on Anthropomentry, design concept and it's development.where our design language has to follow form, space and order.
Our programme was to have some kind of recreational place on the outskirts of the city with an Art gallery (for exihibition), a cafe and gathering place (for discussions) which could encourage people who are great admires of Art.

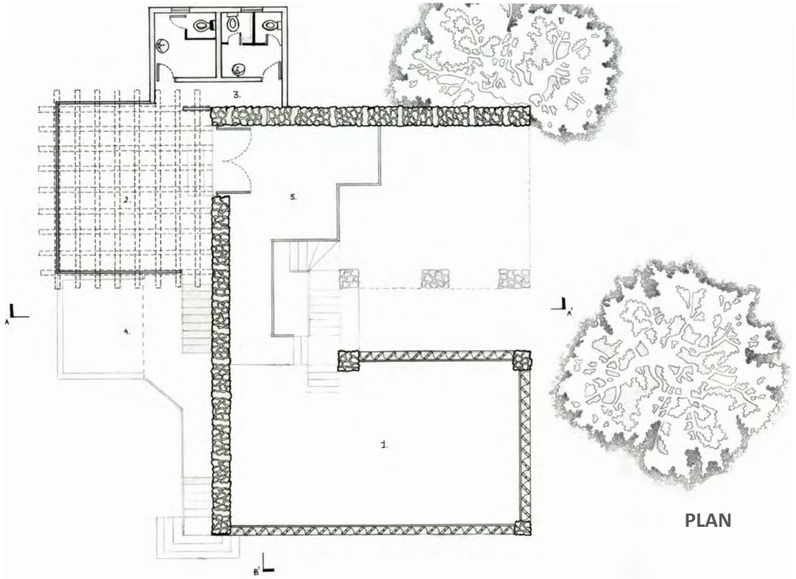




ELEVATION



SECTION AA'



PLAN

SEMESTER 3

PROGRAMME:

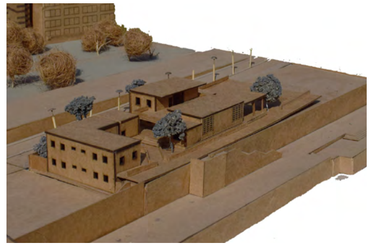
"SEWA- 2030"- Moving with the times, Staying with spirits.

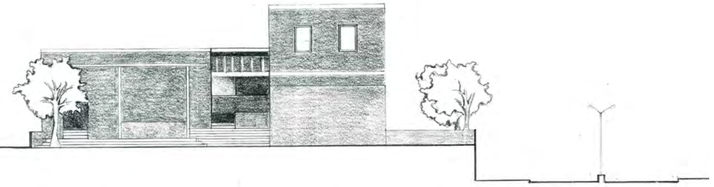
SITE: River front near the Elice Bridge,Ahmedabad

BRIEF :

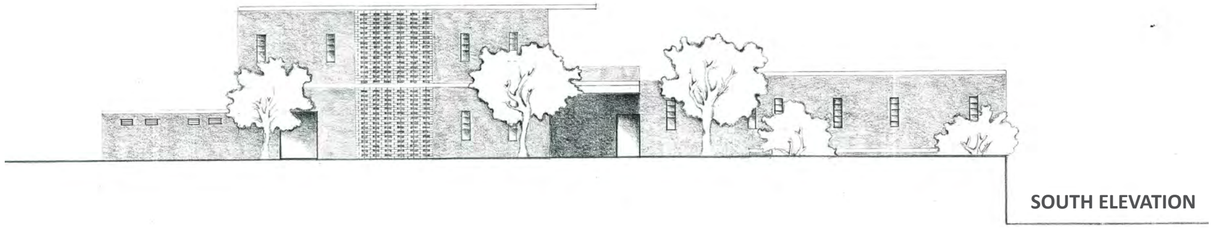
SEWA - The self employed Women's Association is a global organisation that works to empower women often in the most marginalised section of society. 'SEWA - 2030' aims to equip it's members for future challenges, where it will be focused on digital training, innovative incubation centre and opportunities for learning and sharing with wider community.

The first step of the process was to understand their ideology and how the whole institute will incorporate with design..making it feel like more home for women towards the modern part of Ahmedabad.

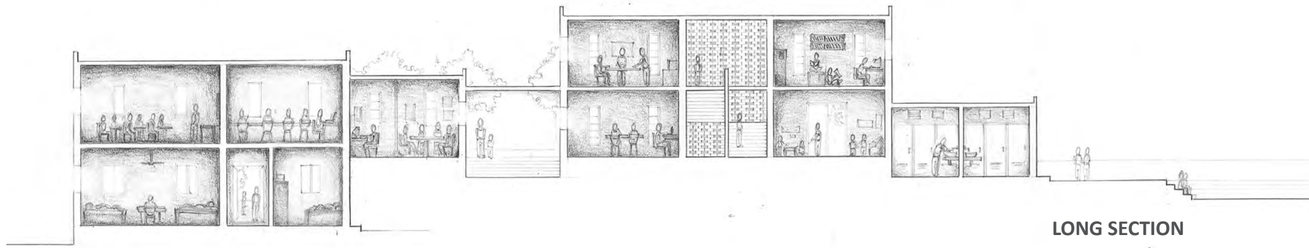




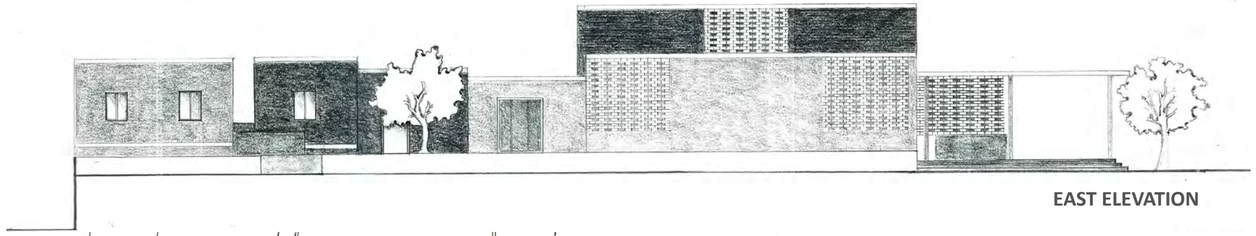
NORTH ELEVATION



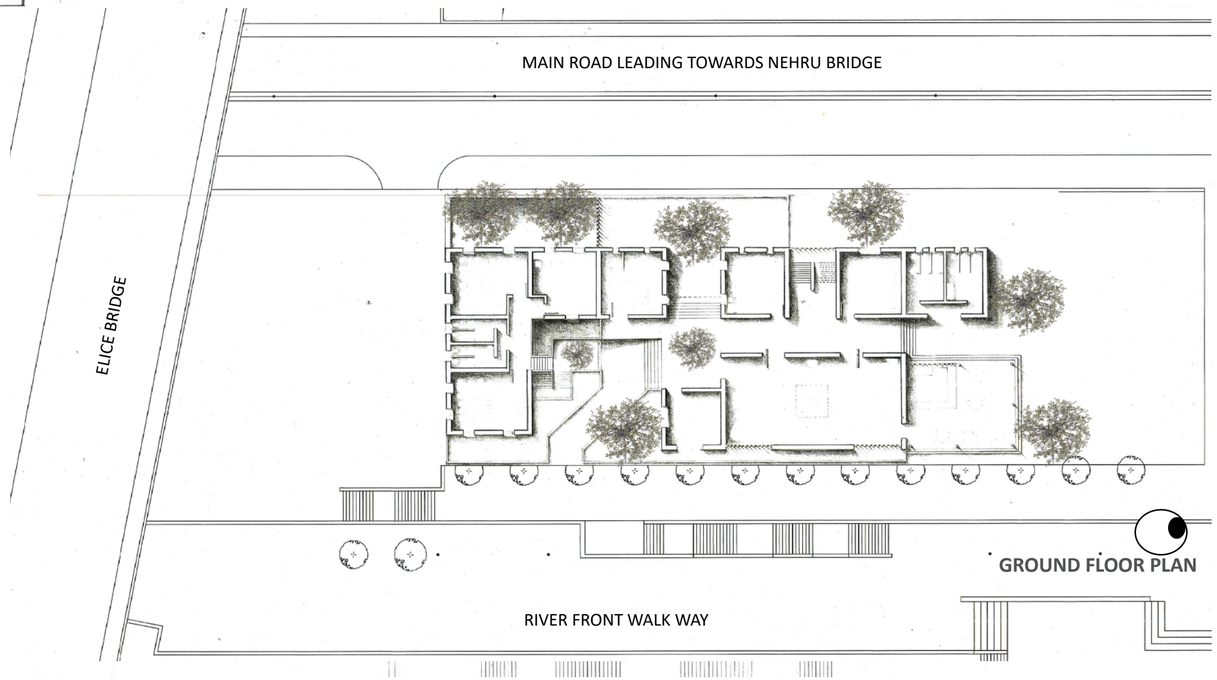
SOUTH ELEVATION



LONG SECTION



EAST ELEVATION



GROUND FLOOR PLAN

SEMESTER 4

PROGRAM:

(CO)PRODUCTION

Designing with people

WOMEN WELLNESS CENTRE

SITE:

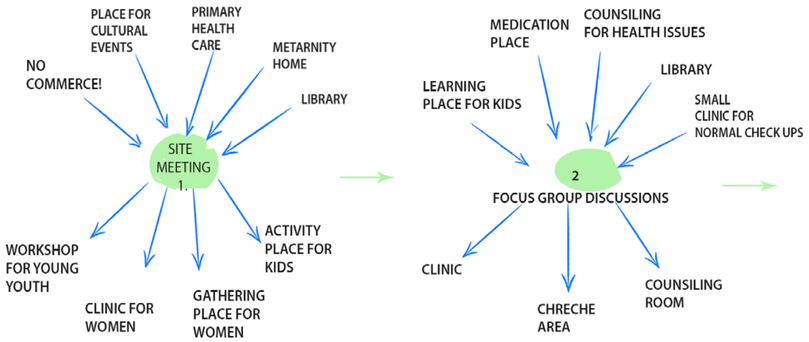
Mandvi ni pol, Old city, Ahmedabad.

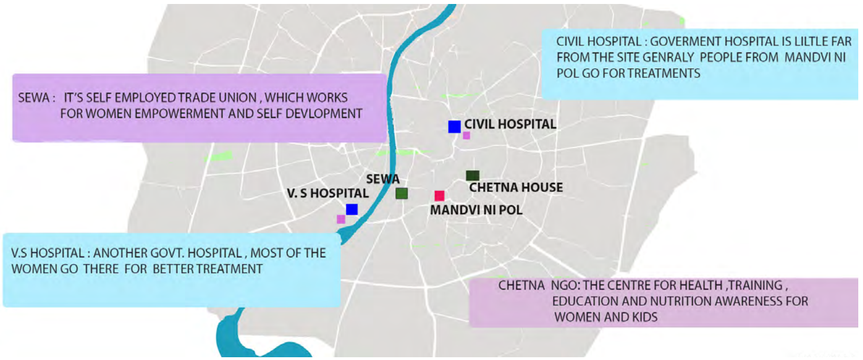
BRIEF :

The studio was focused on the design making process through collective groups discussions, participation of individuals and the designer as creator of coproduction spaces.

This design Project started with discussions with various actors of the pol. To come up with a programme for site the communication and mapping were the tools through which we had our impliment on our design ideas.

After identifing spatial and programmatic requirments for design we had certain intense group discussions with Pol people as they were also part of the design process.

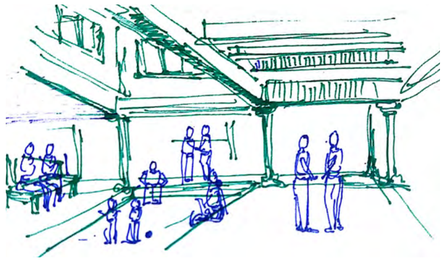




The location of the least near by Hospitals and NGO's from the Mandvi pol. which shows the necessity for women's health care

PROGRAMMATIC UNDERSTANDING :

A place where kid can learn new abilities.



A place for people to discuss certain issues through different counsellings.

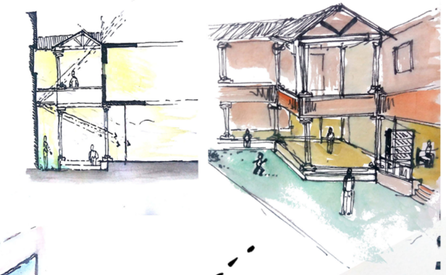
To conduct workhops for youngster's self development

And also they could get guidence under experienced people for their future plans

A small creche and small learning centre for small kids, it would be helpful for working women.

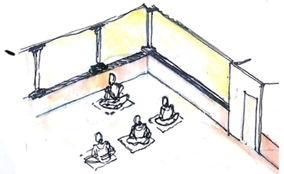
A gathering place for women where they could get proper guidence on their health

PROGRAM :



Backside of the building there is a semi-open space for kids activities and on the upper floor Workout space for women.

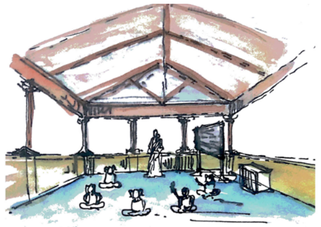
Through the main enterence, the delivery room and Rest room are kept on the left side.



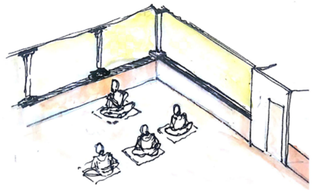
Clinic is just beside the main enterence for easy accessibility.

KEY SPATIAL CONCEPTS

The whole new program of Recreational place for Women's health can have so many different qualities. Women of all age groups can learn and guide each other about their Emotional and Physical health.

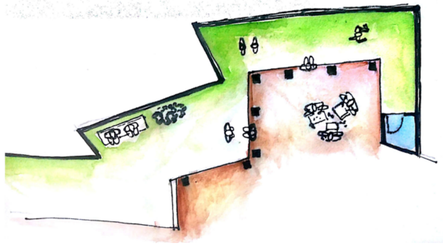


Open spaces around the building will counduct many random ancounters and enough space for kids to play.

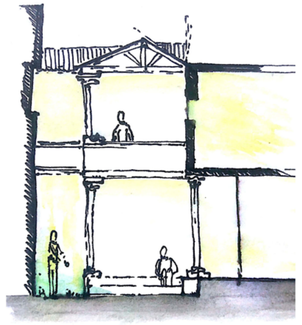


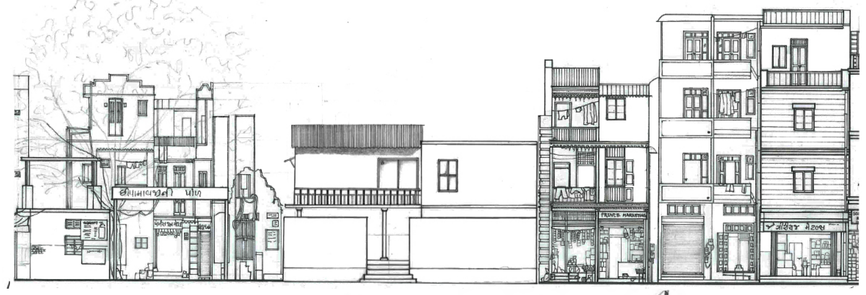
Workout space for Women's Physical and Emotional health.

Back side of the main activity area.

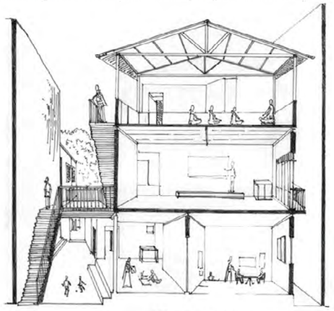


A small clinic for Normal check ups.

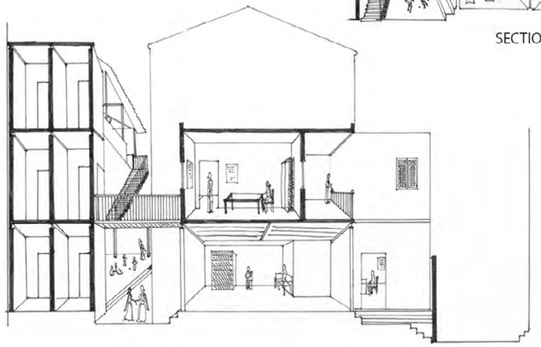




FRONT ELEVATION

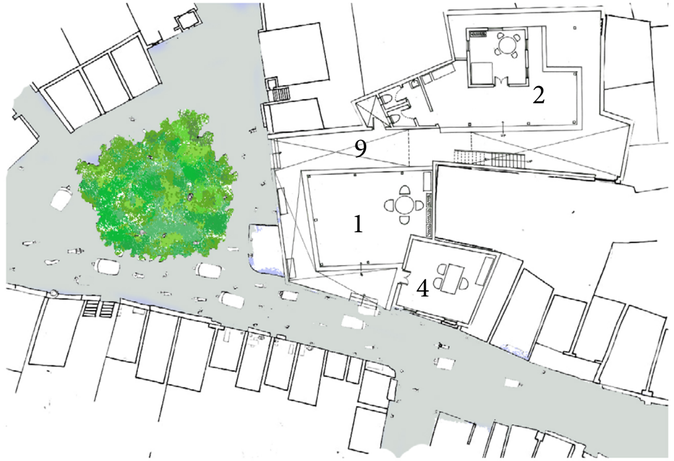


SECTION AA'



SECTION BB'

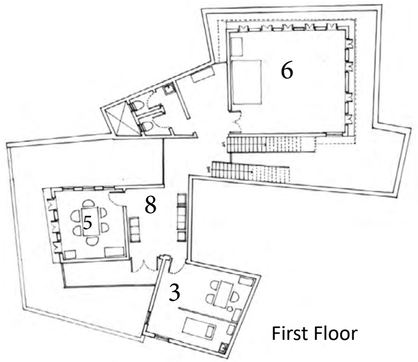
Axo of whole building



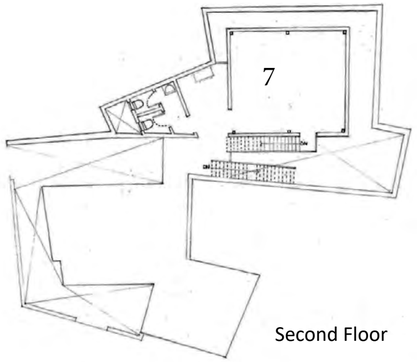
Ground Floor

This program was based on women wellness and the concept was more focused on women's emotional health rather then physical health. The motto of this programme is to have a plce where women can involve themselves in Different activities with great approach of other organizations for their Wellness and for their kids also where they can grow individualy.

1. ACTIVITY AREA
2. KIDS CHRECHE
3. CLINIC
4. COUNSILING ROOM
5. OFFICE
6. SEMMINAR ROOM
7. WORK OUT SPACE
8. WAITING AREA
9. OPEN SPACE

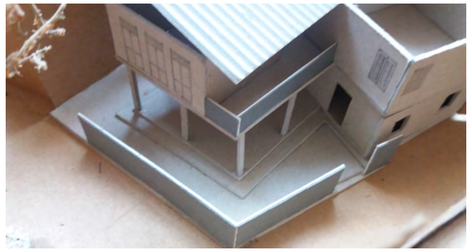


First Floor



Second Floor

Ariel veiw of the building



Looking inwards this otala

Side elevation

Semi Open space

Back Side of building

SEMESTER 5

PROGRAMME :

STUDIO A TO O
(Working Drawings)

SITE:

Kalai, Vapi, Gujarat

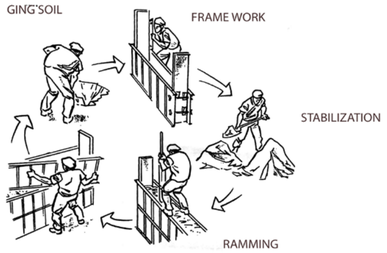
BRIEF :

This studio aims at bridging the gap between academics and construction practices.Before design exersice we had to do material studies and few on going construction site interaction with different experties so that we can apply their knowledge in our design.

My own weekand house at the edge of the kalay resort was facing direct seashore and on the other side a beautiful pond.The whole idea of keeping the weekand house was major motto so that one can feel the direct connection to the nature.

After studying Rammed earth walls i decided to explore more about earth construction while designing and on site interaction took bigger effort to bring this up together.Beside that 1:1 joinery of our own design made us work according to the other person who played role of artisans.

MATERIAL STUDY :



RAMMED EARTH CONSTRUCTION SEQUENCE :

1. SOIL IDENTIFICATION : It is very necessary to know what kind of soil we are going to use for consruction.

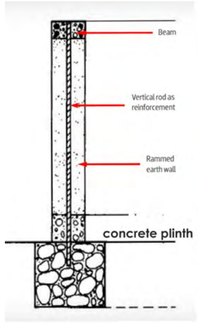
2. SOIL TESTING : Usually one should prefer to have drop test of soil to know the plasticity if soil.

3 SOIL MIXING : 50 TO 70% GRAVEL SAND
15 TO 30% SILT
5 TO 15% CLAY
5 TO 8% CEMENT
2 TO 5% WATER (Includes sand with ssufficient clay and silt.)

While mixing the soil some ideal amount of water will be vary from one soil Mixture to another but the soil should not be too wet or too dry. It can be tested by drop test again. After that cement as a stabilizer should be added.

4. SIRE WALL FOUNDATION :

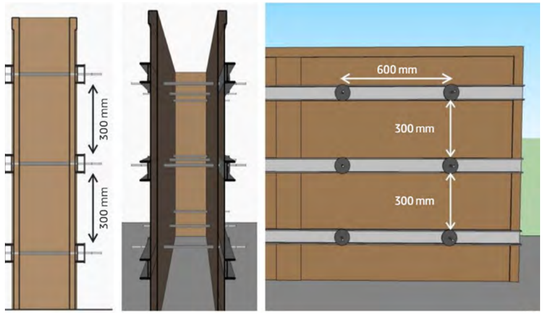
Sire wall is basically structural insulted rammed earth wall where internal reinforcement is a method of stabilizing the rammed earth wall against hoerizontal forces bt using vertical rods of bamboo, wood or steel before ramming period. These vertical elements are fixed to the foundation below and to the ring beam above.

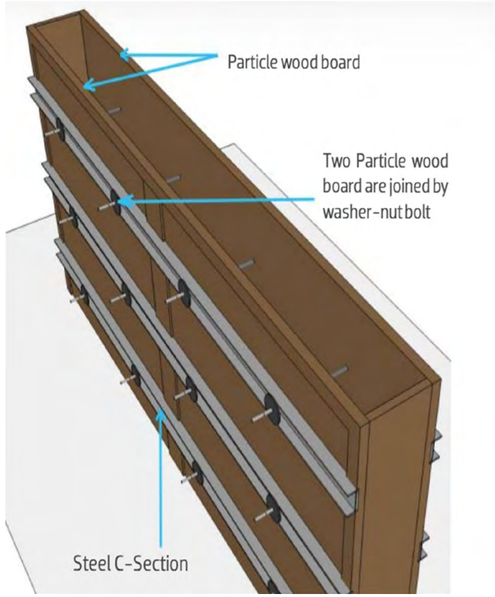


5. PREPAIRING FORMORK

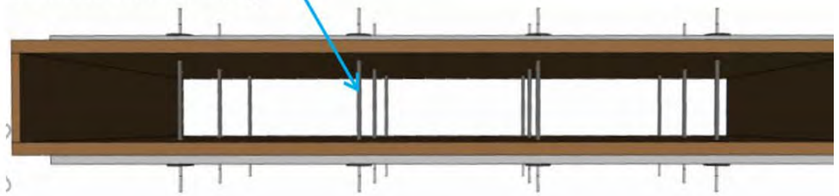
If we're using any textured or rough wood for formwork, then we have to apply oil on the inner surface so that the mixture won't stuck to the surface. Instead of using steel, we can also use wood to make this fromwork.

DIEMENSIONS OF THE FORMWORK





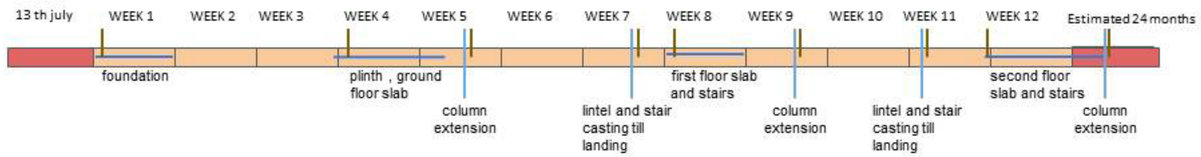
Conduits are provided, so after removing the formwork, wall doesn't get damage because of bolts. Even because of these conduits, we can also and maintain the distance between the boards and that won't become bulgy.



SITE OBSERVATIONS :

SALIA WORK

Salia work and Wood work

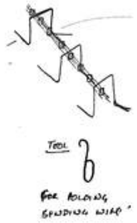


Salia work

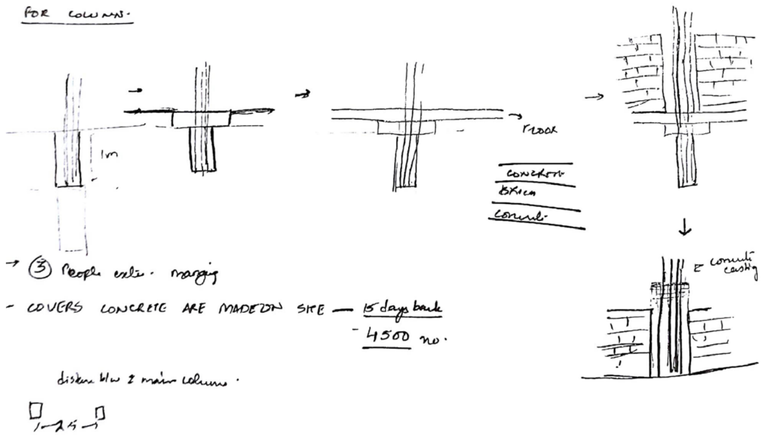
Wood work

- People are involved in column, column cubes, tie beams , lintels staircase, beams, slab.
- Approx. 3 people work in groups
- They get special drawings only showing reinforcement for different elements in the design.

Tools used:

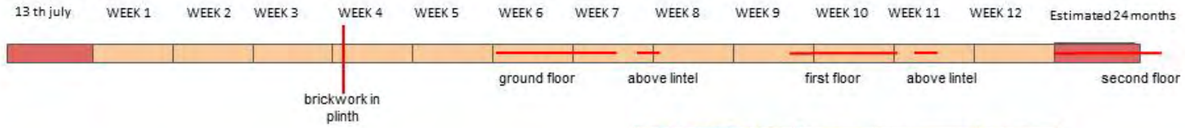


ON SITE SKETCHES :



BRICK WORK

Brick work

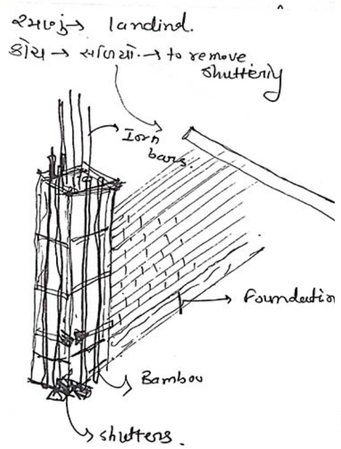


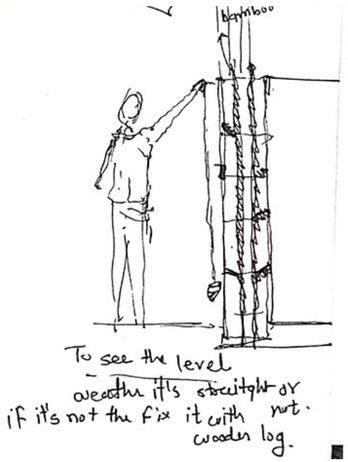
Brick work

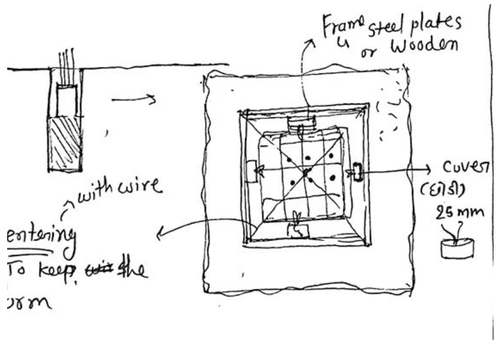
Storage of bricks is according to convenience of carrying them to the place where the wall is being built.

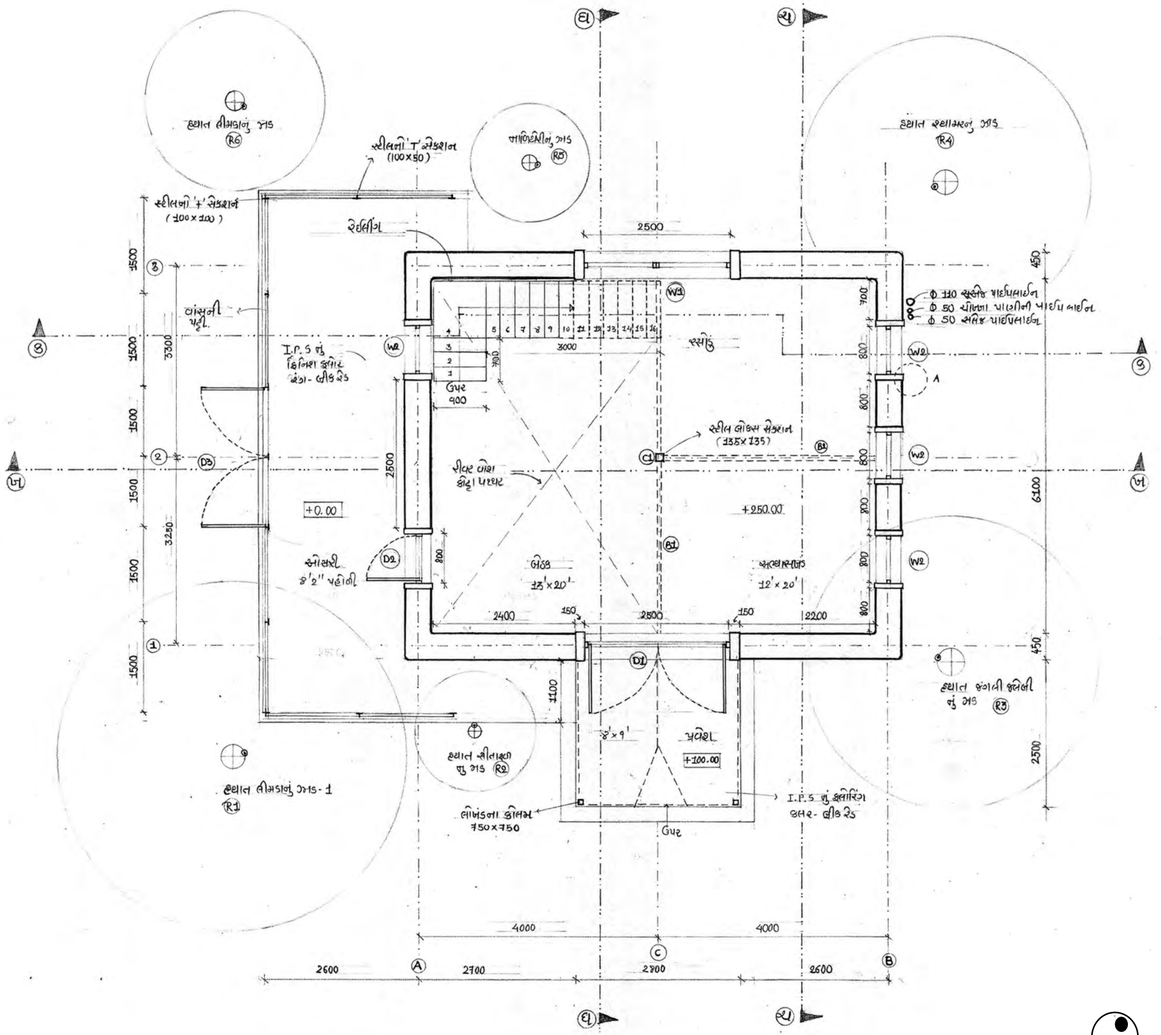
Sometimes they keep inside the site or outside the wall as well.

Making of the Brick Wall for the first floor.

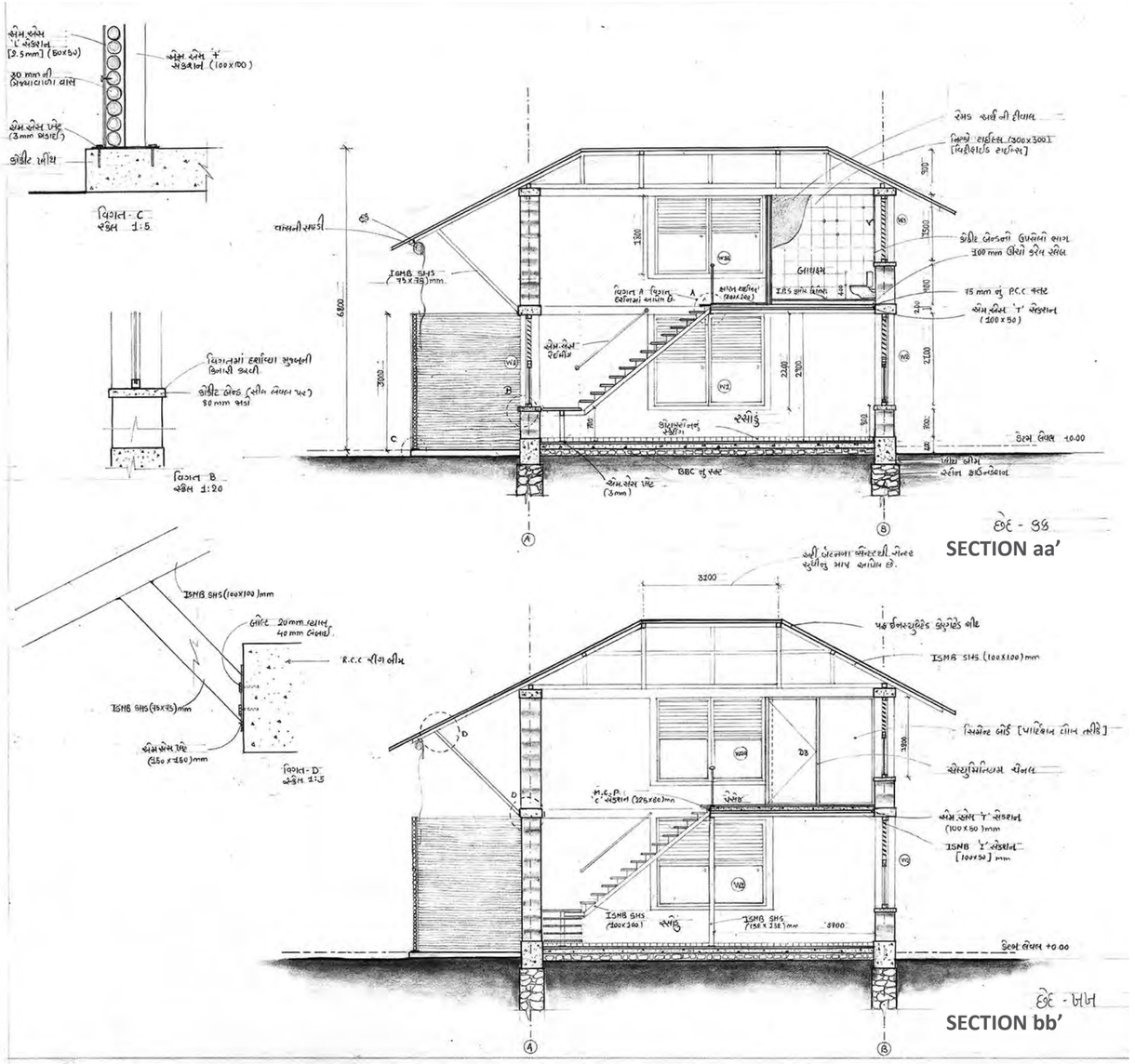




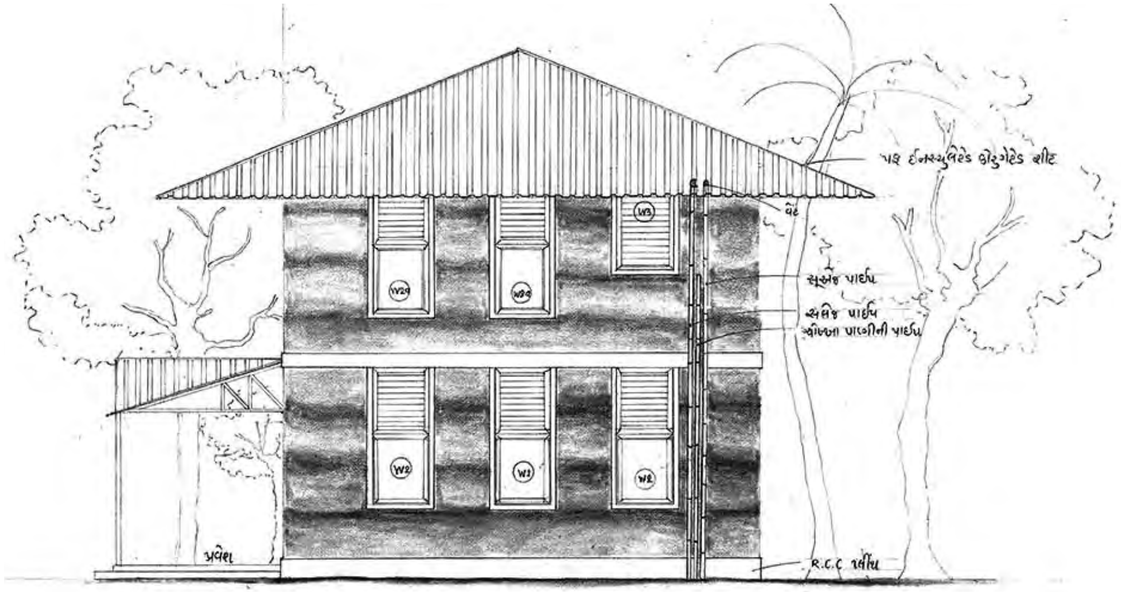




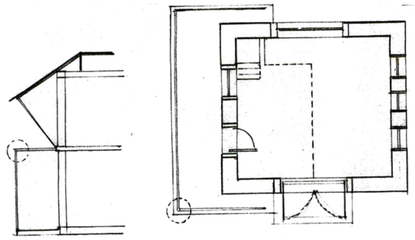
GROUND FLOOR PLAN

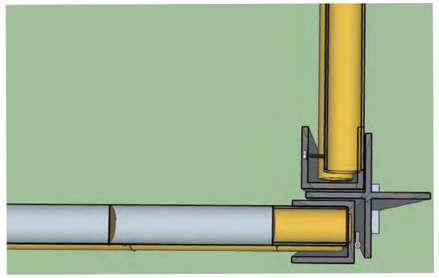


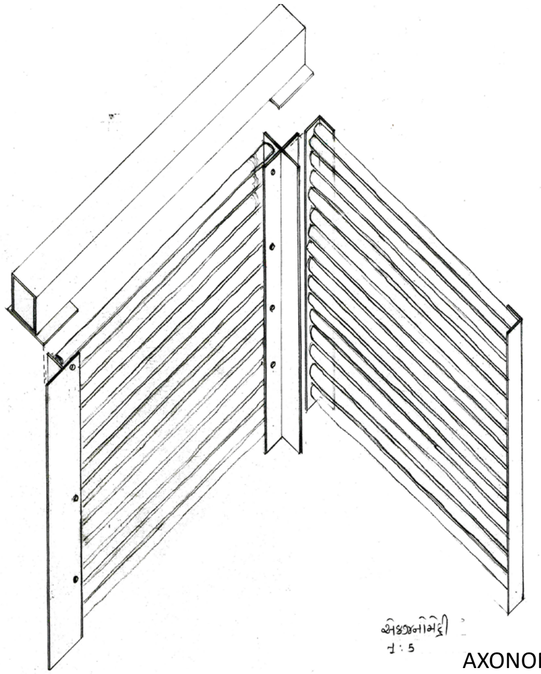
SOUTH EAST ELEVATION



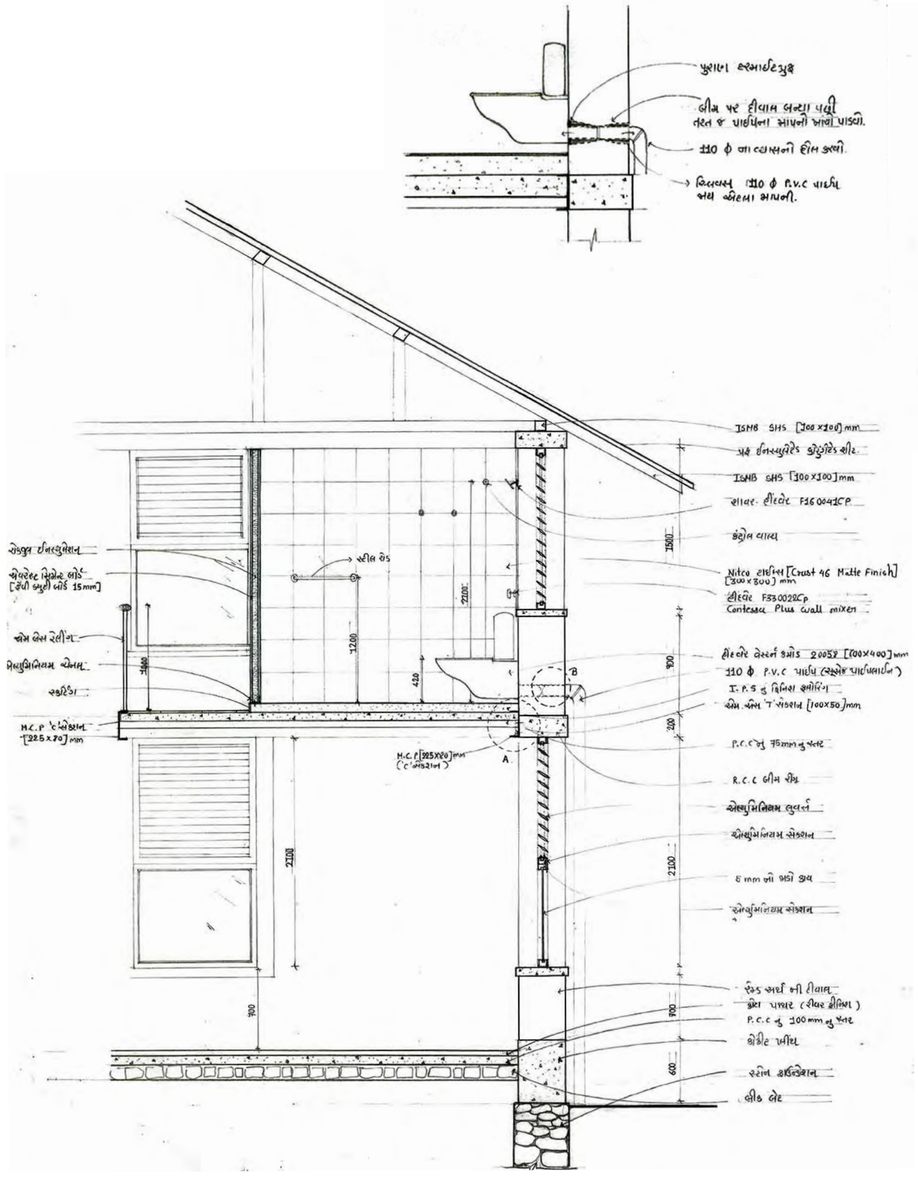
NORTH EAST ELEVATION

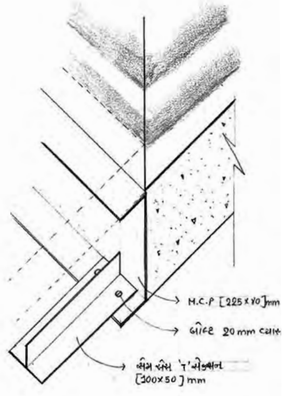




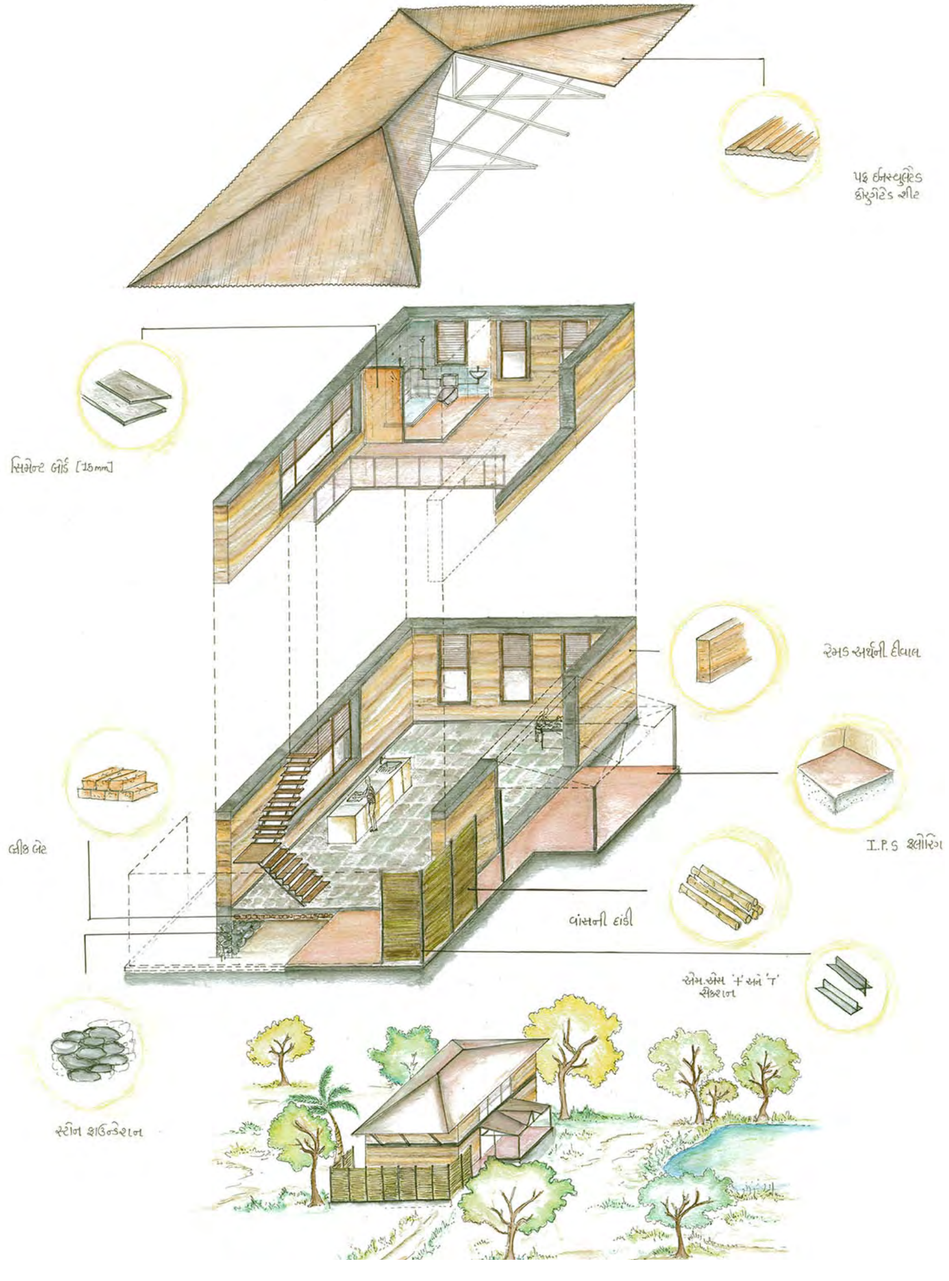


AXONOMETRY





WALL SECTION AND DETAILS



SEMESTER 6

PROGRAM :

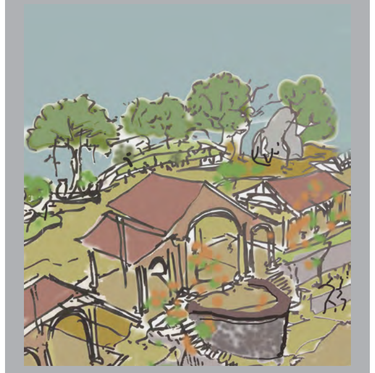
MAKING LIVING PLACES

SITE :

PALODIYA VILLAGE, AHMEDABAD

BRIEF:

Reflecting upon how we feel about our surroundings and how one wants to be in living place is a core ideology of this studio. Before this main project, we have been through some major exercises which were more focused on how we observe the environment and how did we describe those places which has more life around them! So here we have selected the edge of the lake which has so much potential to create more living spaces in it. our site is just sticked with edge. So we came up with the concept of vadi as a gathering place where people can sit, relax and celebrate small functions and festivals. It connects the village, its people and the lake.



EXERSICE : 1

Our first exercise was about to describe a place through black and white photographs in order to identify the qualities that make the place more alive. During this exercise we had to observe the people, objects, natural and built elements at Palodiya village and it's surroundings.

Here the emotional qualities of the particular place is being described by six different lenses which are love, nostalgia,tragedy, comedy, boredom, and irony.

COMEDY

LOVE

IRONY

TRAGEDY

NOSTALGIA

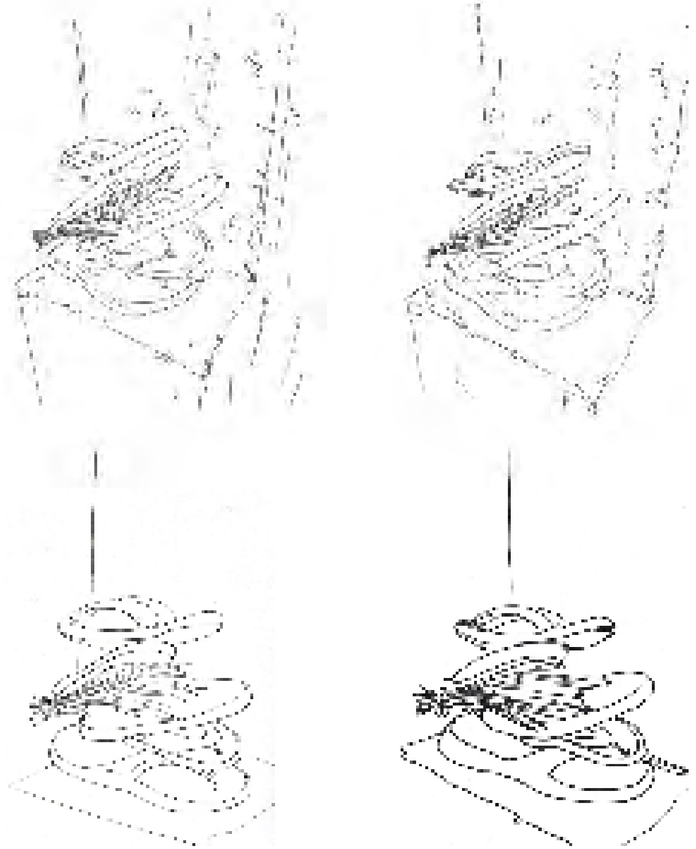
BOREDOM

EXERSICE : 2 TRACING THE OUT LINES

In this exercise we had to pick up the photos from each lenses and trace the basic outlines of the frame by Keeping it's own emotion in the mind.Through this one can understad the nature of lines in different lenses.

TRANSFORMATION OF LENSES:

COMEDY TO LOVE:



EXERSICE : 2A

IN THIS EXERCISE WE HAD TO DESCRIBE THE PLACE VERBALLY BY OBSERVING THE SURROUNDING ENVIRONMENT OF PALLODIYA VILLAGE THROUGH WHAT WE FEEL SMELL OR HEAR.

TOUCH

SMOOTH : A SMOOTH SURFACE OF THE KOTA STONE OTALA

COARSE :TOUCH OF RAW STRAWS KEPT ALONG WITH THE WALL.

NOSTALGIC : A ROUGH BROKEN WALL OF AN OLD HOUSE

DUMP : A LITTLE WET GRASS ON EDGES OF THE SMALL POUND

BRISTLE : SUPER DRY MUD WALLS

BUMPY : UNPLASTERED FLOOR OF SMALL COURTYARD

SMELL AND TASTE

BITTER : SMELL OF BITTLE NUT

EARTHY : WET BRICKS WERE PLACED AT ONE CORNER OF THE NARROW STREET

SUGARY : TASTE OF SWEET CHAI

ROTTEN : A SMAELL OF WASTE FOOD AT ONE CORNER OF OTALA

RAW : SMELL OF TYPICAL GROSSARY SHOP

STALE :PILE OF DRY STRAW WERE KEPT ON ONE SMALL COW SHED

SCENTED: PLEASENT SMELL OF DHOOP COMING FROM SMALL SHRINE.

SOUND

JANGLING : A LOUD NOISE COMING FROM A MOTOR GARAGE

COUGHING : AN OLD MAN WAS COUGHING OUT LOUD ON THE THE MAIN ROAD.

SOOTHING : A PLEASENT SOUND OF LADIES ANKLETS

GIGGLING : SMALL SCHOOL GIRLS CHITCHATTING ON THE DOOR STEPS

GURGLE : OVER FLOWI NG WATER FROM PLASTI C BUCKET AT CHOWKADI

TINKLE :BELT ON THE COW'S NECK WITH SMALL BEL

LIVING PROCESS:

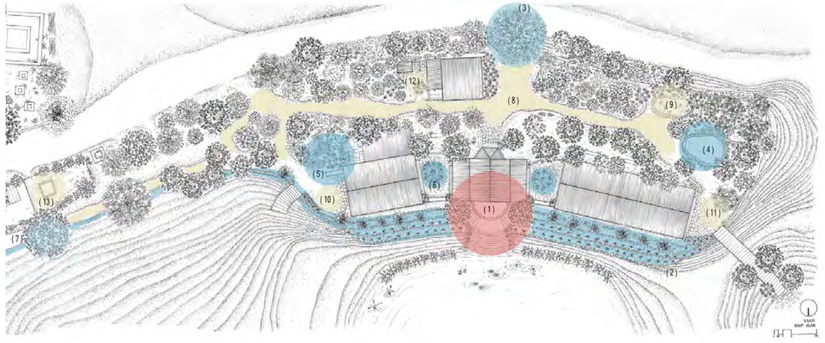
IDENTIFYING AND DISCOVERING SUCH PROCESS THAT CREATE LIVING PLACES. FINDING THE QUALITY OF WHOLENESS AT PALLODIYA VILLAGE AND SURROUNDINGS THROUGH THE PERSONAL FIGURE OF 'THE MIRROR OF THE SELF' AND 'SENSE OF BELONGING'. THE DESCRIPTION OF SUCH PLACES IS SHOWED BY SKETCHES, PHOTOGRAPHS AND VERBAL DESCRIPTION.

A SKETCHED PLAN OF THE PALLODIYA VILLAGE SHOWS THE MANY CLUSTERS ALONG WITH MANY STREETS.

A TEMPTING SWEET FRUIT CALLED PELLO WHICH GROWS ON THE WHOLE DO TREE. AN OTHER INTERESTING THING ABOUT THE TREE IS ITS FORM. THE WAY IT SPREADS THE FOLIAGE AROUND ITSELF EVOKES THE FEELING OF WHOLENESS

A SILENT SECLUDED PLACE AT THE EDGE OF THE LAKE WHICH COVERED WITH THICK GROWTH OF TREES AND COMPOUND WALL.

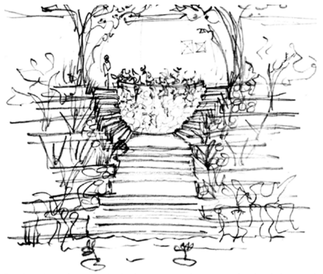
By following Christopher Alexender's theory of Creating centres, which gives the whole new identity to the place We observe the site according to that and classified three types of centres on the site. After that we worked upone the each centres and tried to enhance it well. our site was located on the edge of the lake.



Devlopment of the main centre with two Kesuda trees :

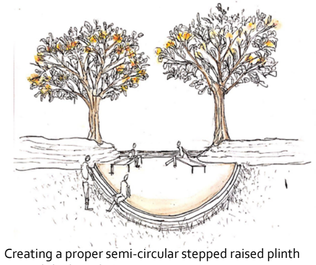
Space below two kesudo trees framing the lake

Connecting bund with lake by providing steps from the centre



Projecting the semi-circle outwards towards the lake and creating a stone bastion.

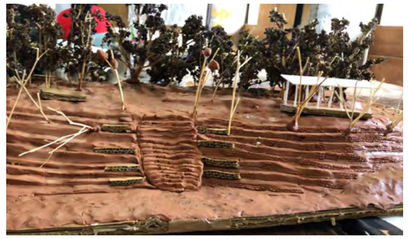
Enhancing the centre by creating boundary by raising it naturally and shading it with two neem tree



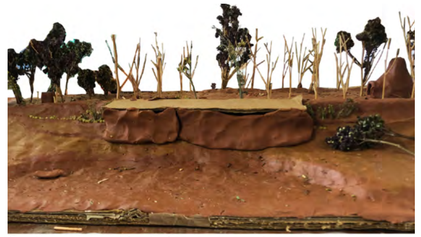
Creating a proper semi-circular stepped raised plinth around the kesudo trees

Enhancing it further by creating a strong boundary around that centre through steps leading to lake

By working the model we actually went through the development of bund and edge of the lake.

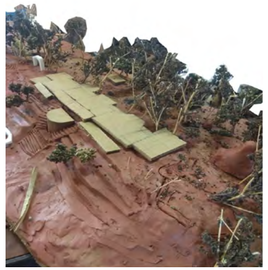


Creating stone retaining terraces, with steps directly leading to the lake from kesudo tree centre.

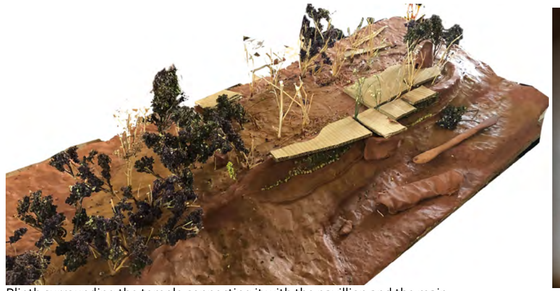


Creating an edge in front of kesudo tree, with a natural slope.

Using light thin coloumn and segmental arches to make the pavillion feel light and visual connectiveness.



Designing of plinth with fixed bastion and extended bund



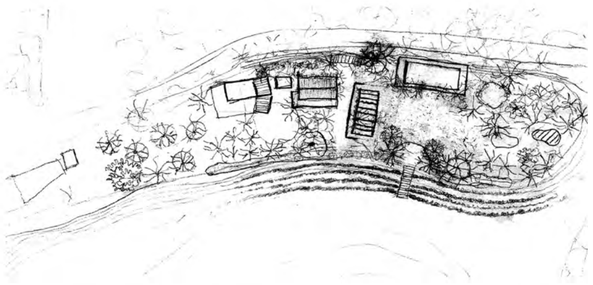
Plinth surrounding the temple connecting it with the pavillion and the main central part protruding from the edge towards the lake.

Using heavy coloumn and arches to give a sense of comfort and enclosure.

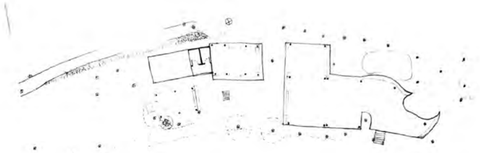
The space below the kesudo tree becomes a deck to the lake, providing shaded space below, in dry summer season.

Plinth development in different levels with main central part as semi-circle which takes the shape of a bastion.

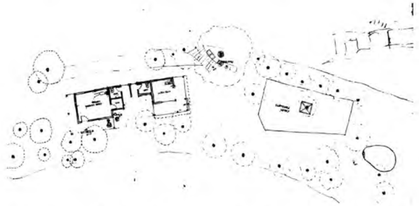
Organisation of spaces through the simultaneous designing in model, plans and sketches



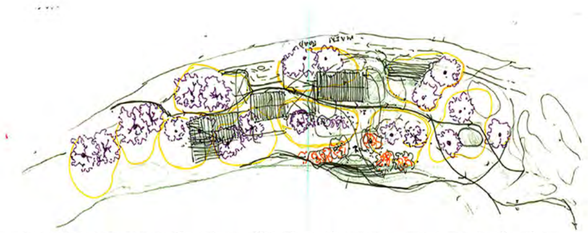
Organising of spaces through creating courts around kesudo tree bounded by pavilion and trellis. Trellis acts as a spillout for kitchen and creates secondary centre around peepal tree.



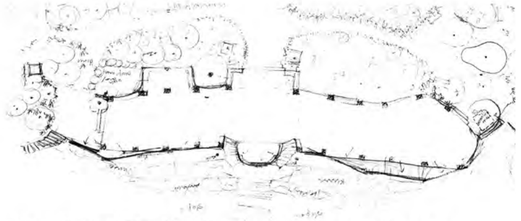
Organising vaadi enclosing the temple using organic shape enhancing the temple as a centre and creating a pavilion crowning the organic plinth.



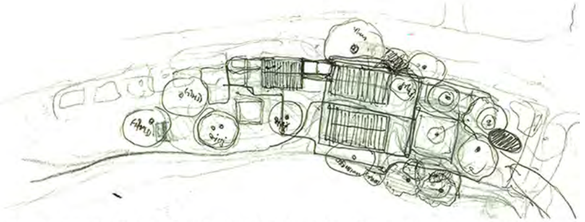
Designing a courtyard around kesudo tree and existing neem tree with pavilion and the kitchen as builtspaces.



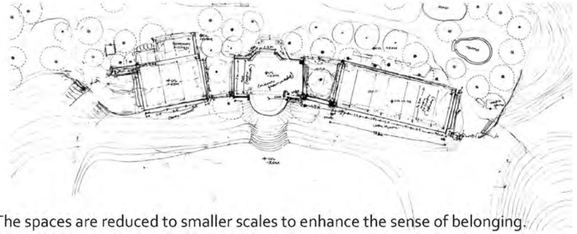
Organising groves on the edges of the bund leaving spaces in centre for the development of pavilions, which is broken in parts and creates spaces in between.



Placing vaadi pavilion on edge of bund by extending it by ten meters, creating a centre pavilion with large scales establishing identity to vaadi and framing lake with kesudo tree in front.



Organising pavilion in the centre of the bund breaking its linearity which creates a court with temple, kesudo tree and a pond with groves.

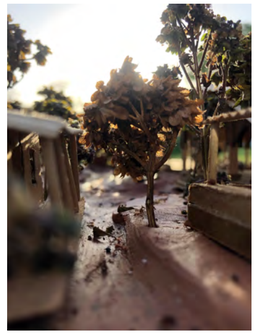


The spaces are reduced to smaller scales to enhance the sense of belonging. The courtyards between the pavilions are developed with a homely nature by planting champa tree.

Model Picture

THE LONGER PAVALLION

ANOTHER SIDE OF THE SECOND PAVILION

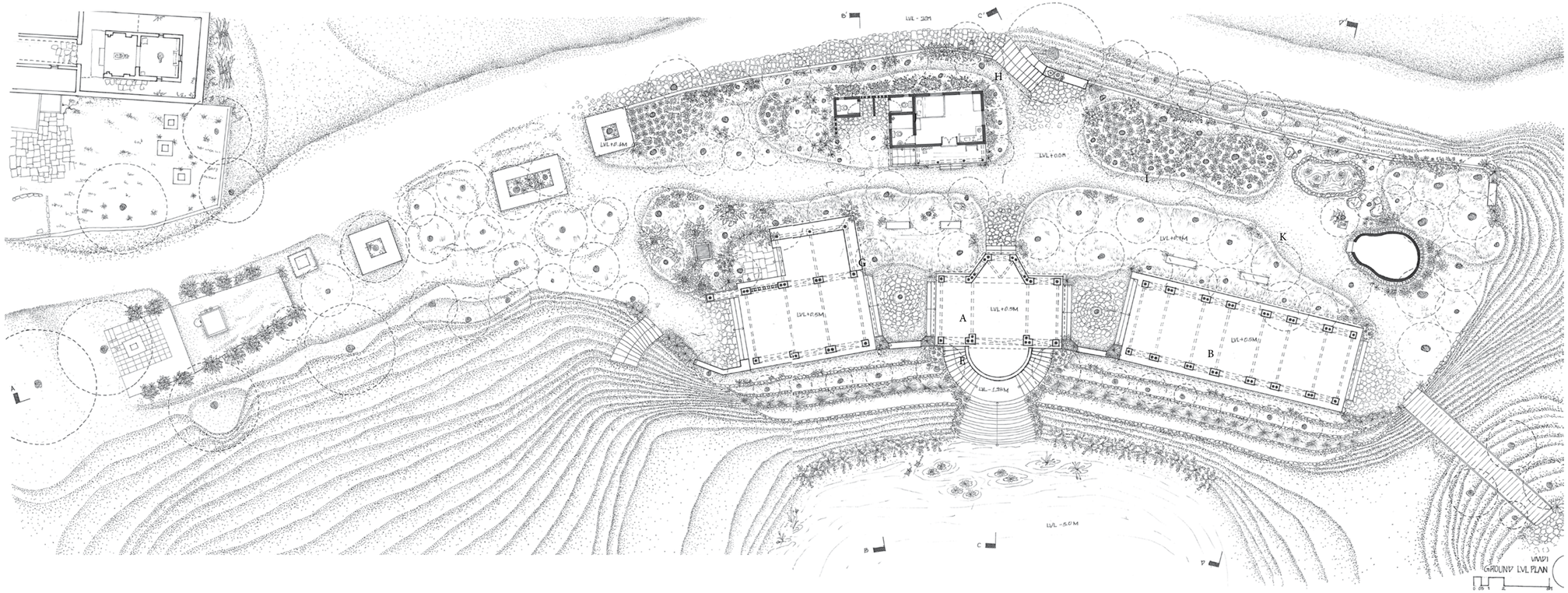


THE PATHWAY

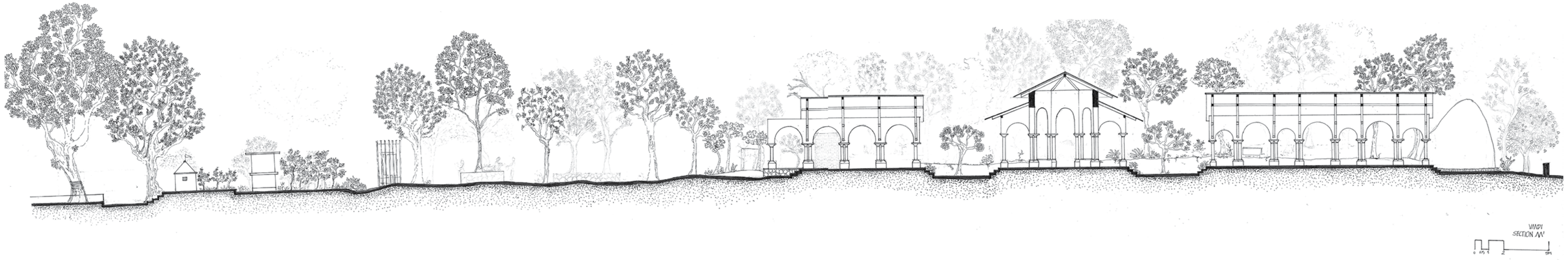
A COURTYARD BETWEEN MAIN PAVALLION AND SECOND PAVILION

LOOKING ACROSS THE COURTYARD

PATHWAY LOOKING TOWARDS THE KITCHEN AND CHOWKADI



A Central Pavillion
B Main Pavillion
C Kitchen Pavillion
D Temporary Kitchen
E Bastion
F Lake entrance court
G Courtyard between Pavillions
H Peepal tree Entrance
I Mound with food forest
J Caretakers Room
K Temple Court
L Fruit Market
M Toilet



SUMMER SCHOOL- 2019

PROGRAM :

Planning and design of confined masonary building in Earthquake prone area of India

SITE :

IIT GANDHINAGAR, AHMEDABAD

BRIEF:

During this course we got introduce to Confined masonary and it's construction process. we also visited the IIT Gandhinagar campus for reference. Our main assignment was to work upon a project where we were given a different types of units and we had to modified them architecturally and with structral consultance also but on the basis of Confined Masonary Construction process. Beside that we had to make a report which includes load analysis, sesmic load analysis,ETAB model, cost estimation as this cource was outlined towards Structural analysis.

CONFINED MASONRY FOR RESIDENTIAL CONSTRUCTION

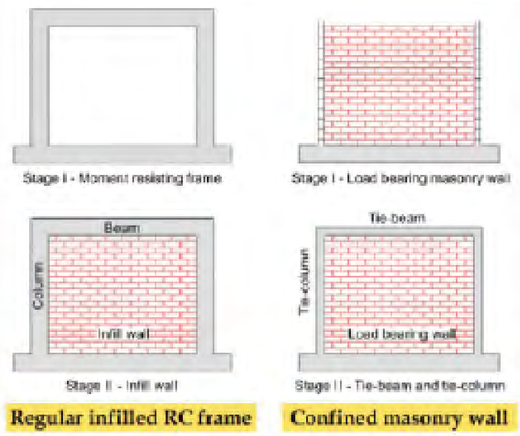
INTRODUCTION

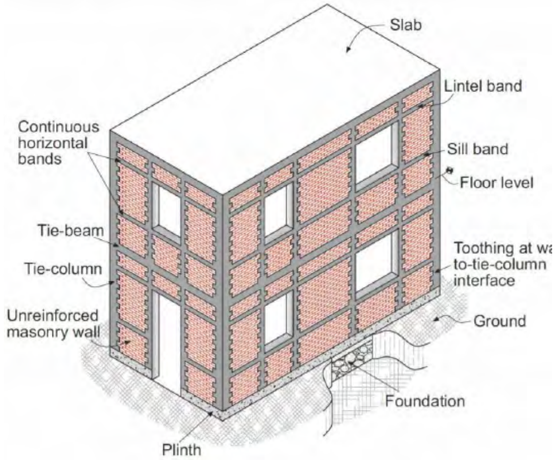
Confin ed masonry is a technology which uses the same basic materials concrete and bricks that are found in unreinforced masonry construction and in RC frames with masonry infills, but with a different sequence. It is a system where wall panels are constructed first and later confined by casting vertical and horizontal RC elements known as tie-columns and tie-beams.
Tie-columns should be provided at wall intersections, door and window openings, free ends of the walls, and at intermediate locations in long walls (usually at a maximum of 4 m spacing).

Key components of confined masonry:

RC floor and roof slab
RC plinth bands
Confined Walls
Foundation

Confined masonary wall has more resisting capacity than regular infill RC walls. As youcan see the construction sequence of confine masonary where masonary walls and rc tiebeams and tie column act as one unit after construction they are load bearing walls act as a composite structure which helps themto sustain gravity and lateral loads more than RC frame structure.

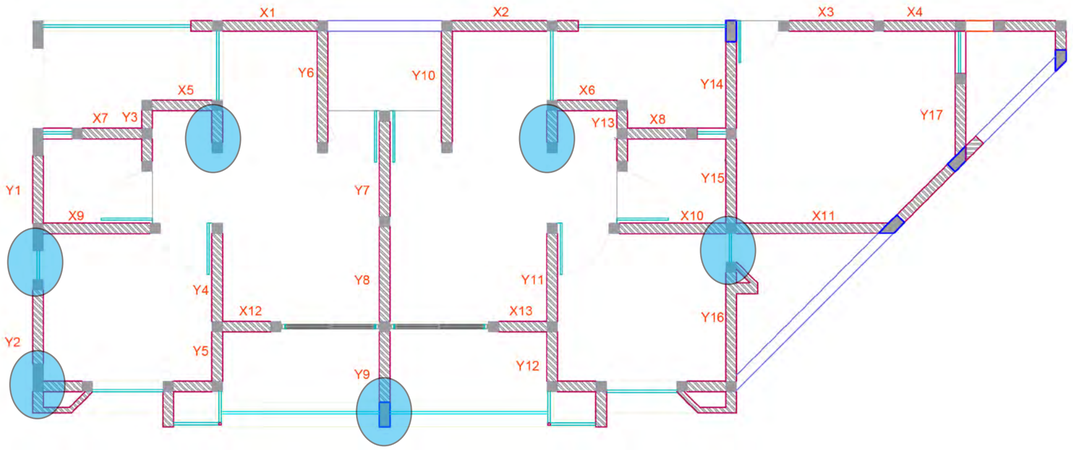




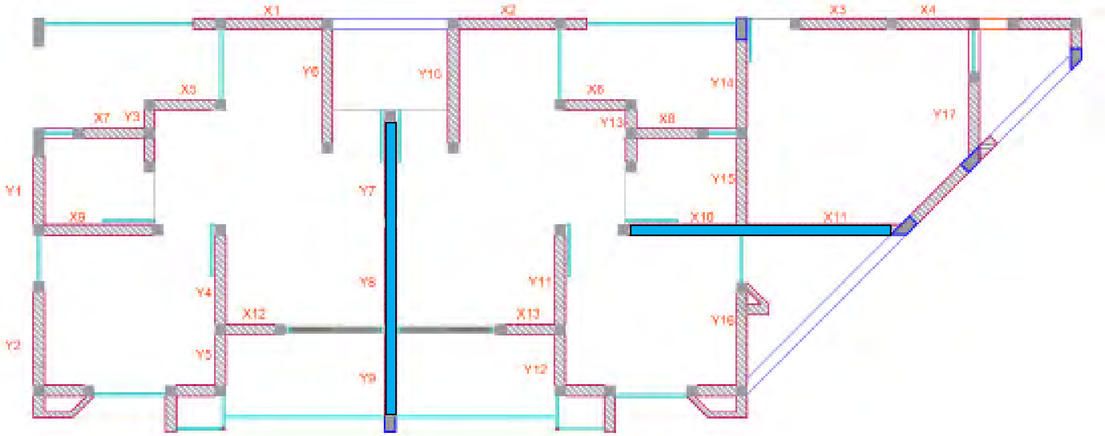
WHY CONFINED MASONRY WAS SELECTED FOR THE PROJECT?

The site falls under seismic zone III as per Indian seismic code IS:1893 which implies a shaking intensity of MSK(scale VII). Confined masonry buildings have better earthquake performance than unreinforced masonry walls and reinforced concrete frames. This technology is appropriate for buildings up to four-storey. More economical as compared to RC frame construction.

OLD PLAN LAYOUT :



NEW PLAN LAYOUT :



Structural load resisting system :

In this project confined masonry as composite structural system has been used where different materials contribute to load resisting system.

A). Masonry : consisting flyash bricks and mortar (m1)
B). Concrete : m20
C). Reinfocing steel : fe 415

Here, fly ash brick walls has been confined by tie beam and tie column in way that they have become a major elements of the building.Where they are capable for resisting lateral and seismic loads.

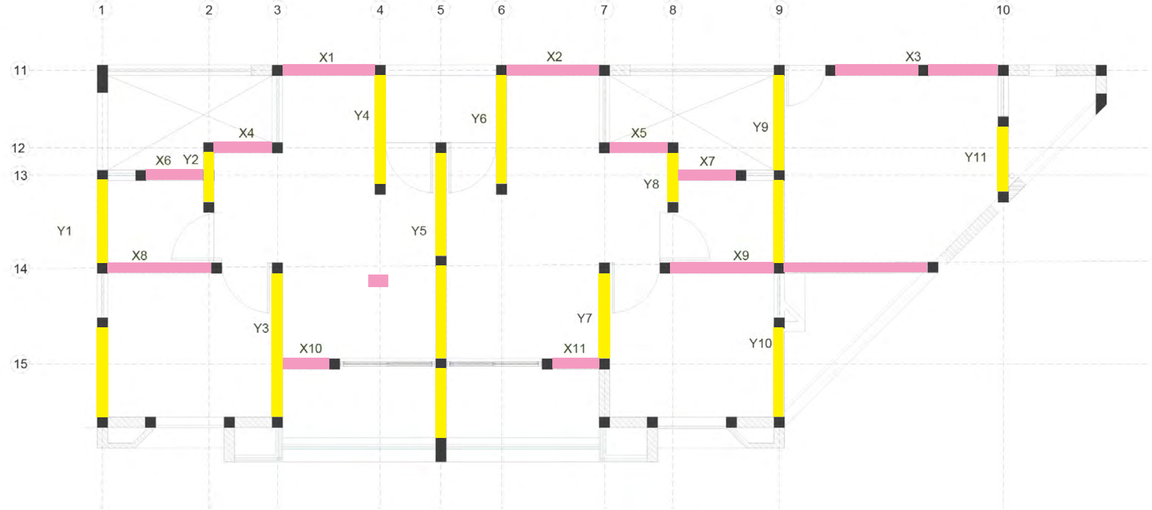
As you can see in the plan the walls,

1. In y direction the longest wall –
   4.5M is being broken in two parts by one tie columns (230*230) at The length of 2.5M.

2. In x direction the longest wall –
   5.2 M is being broken by one tie column (230*230) at the length of 2.5M.

These conditions are playing the main role in taking lateral and seismic loads.

Here, we have shown the confined walls in X and Y Directions.



RELATED STUDY PROJECT

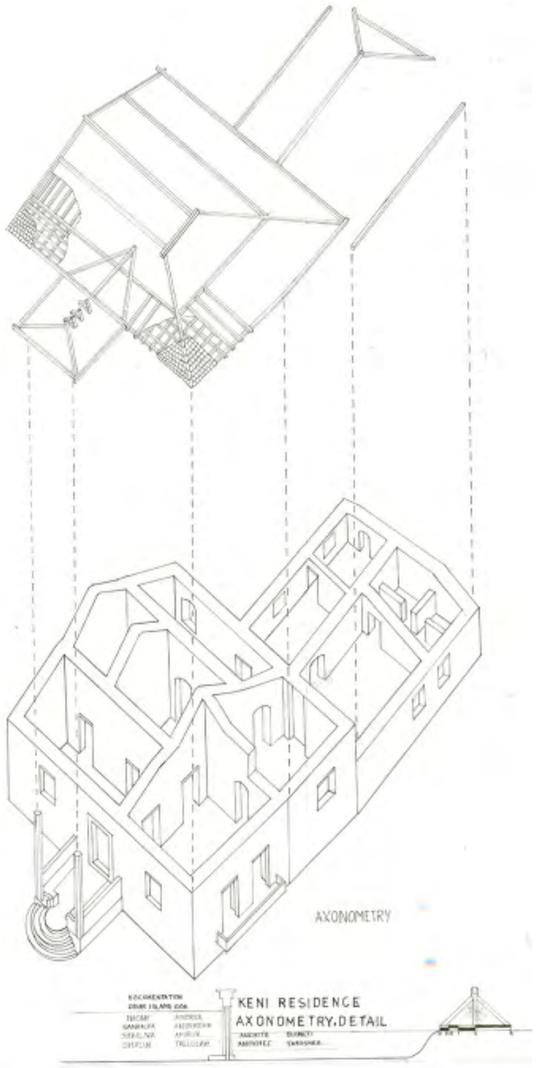
RSP - 2016

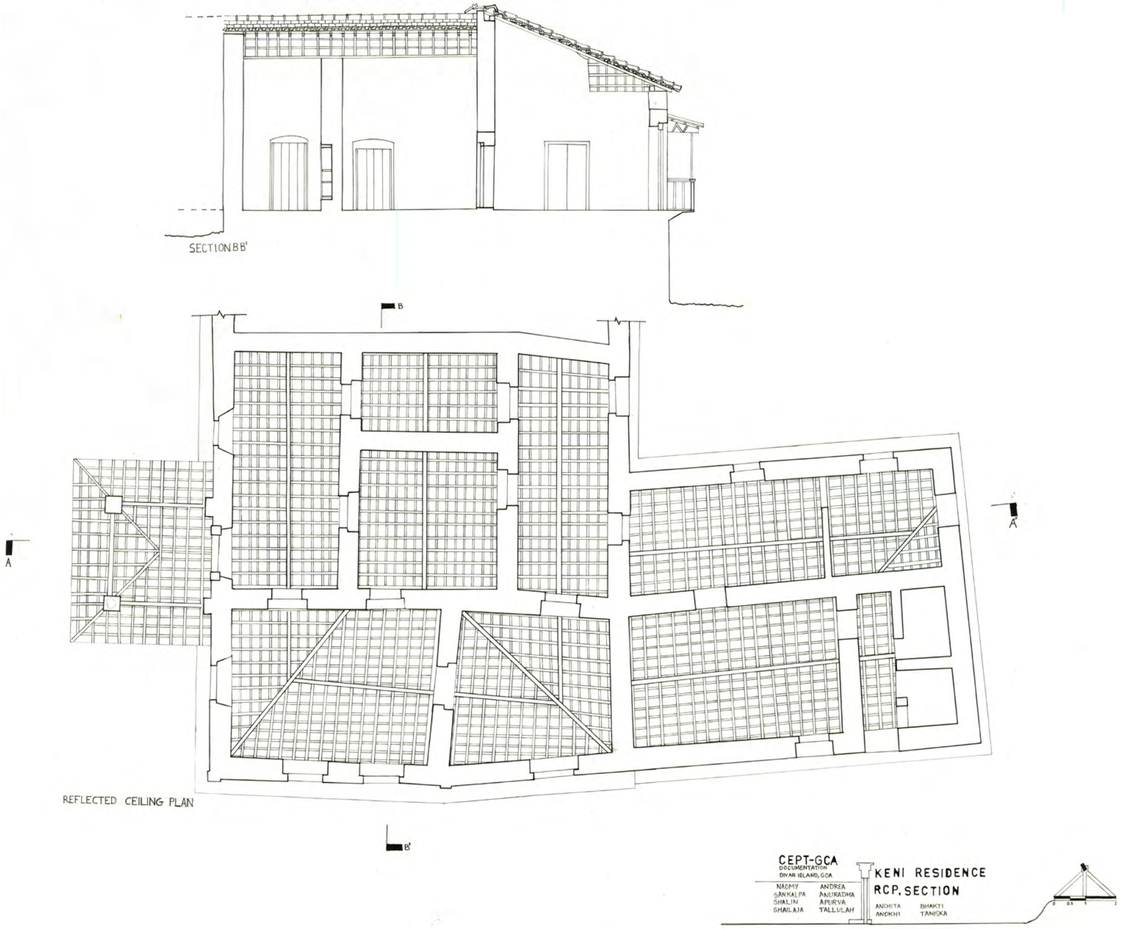
PROGRAM :

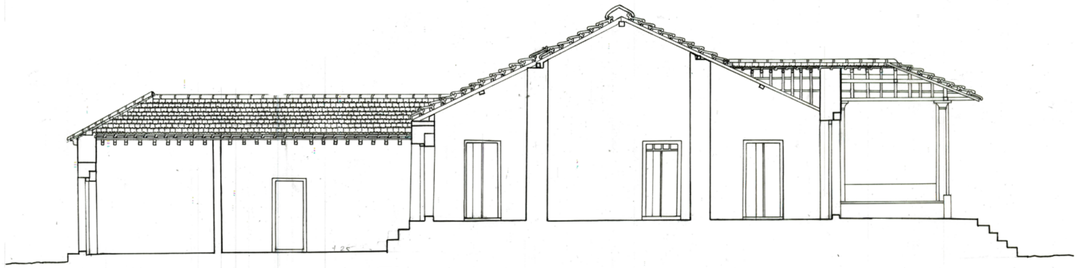
HOUSES OF DIVAR ISLAND, GOA

BRIEF :

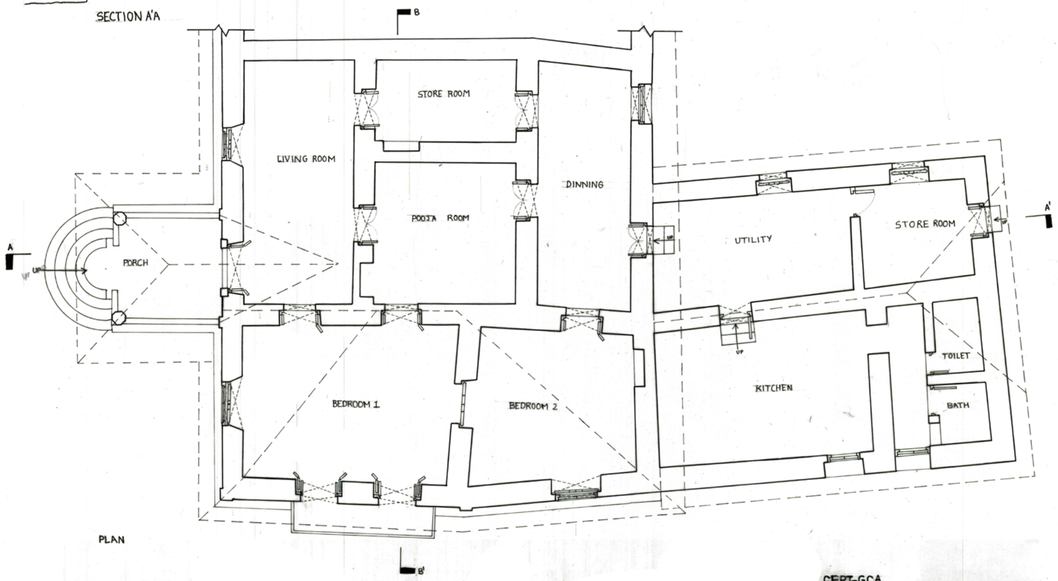
Each one of us had to measure draw Old houses of Divar island in group of two. it was our first experience of doing measure draw by studying local materials and details. In our case we had around 200 yrs old typical Goan house. In the end we came up with various wooden details and structural details.







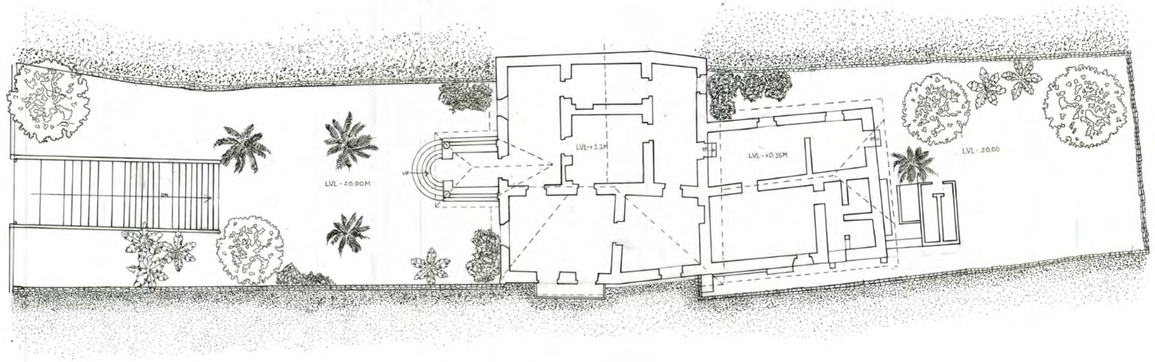
SECTION A'A



PLAN

CEPT-GCA
DOCUMENTATION
DIVAR ISLAND, GOA
NAOMY ANDR
SANKALPA ANURADHA
SAILAJA APURVA
SHALIN TALLULAH
ANCHITA BHAKTI
ANOKHI TANISKA

KENI RESIDENCE
PLAN, SECTION



CEPT-GCA
DOCUMENTATION
DIVAR ISLAND, GOA
NAOMY ANDREA
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SHALIN TALLULAH
ANCHITA BHAKTI
ANOKHI TANISKA

KENI RESIDENCE
SITE PLAN

SEMESTER - 7

PROGRAM :

SHARED MEMORIES , COLLECTIVE SPACES

BRIEF :

The Patel community who are the original inhabitants of Ambli, increasingly move out of the village. Still, they maintain close connection and feeling of belonging with the gaam, but do not find a common space to feel comfortable at. This proposal is concerned with connecting them (as well as the rest of the community members) with their native village. To achieve this, I have mapped their spaces of memories through a participatory perception mapping that included the Patel community members, their trust, and other residents who use the common temple regularly. Location of this program placed at one of the most memorable places for the long-standing residents, at the edge of Ambli lake beside the Ganpati temple. The program came from my conversations with the above-mentioned user groups. This intervention will be a place for literature, learning, education as well as other communality activities and services that the community needs to access. The plaza is aimed at religious activities connected with the temple, as well as communal activities like yoga and meditation.

Scenario of the Patel Community :

Patel's came from different part of gujurat and etablished the Ambli Village

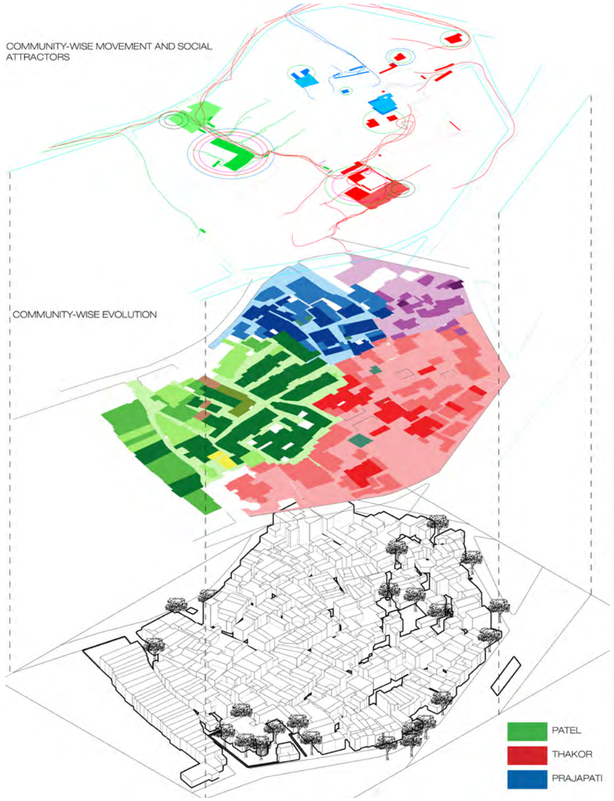
Patel community used to live in small Vas

They used to farming before near by Ambli

After some year the number of houes increases.

Patel's were the core reidents of the Ambli village and they have moved out of the Ambli because certain reasons like,
Increment of Family members,
Most of them got job and buisness work out of the village.
Better education for their children.
These main factors are the reason of choosing them as user group to get them closer to their native place.

Social Structure of Ambli



Social connection and Memories :

Main location association site
Secondary location association

Vision

Revitalizing the spaces of memory and to inculcate the potential of village

Reviving the edge of lake

Library
A small public library with technical services, Administrative services for user group so that they can involve themselves in library for educational information and personal development purpose.

To bring people towards lake edge

A Direct access towards lake edge and small gathering for people

Reviving Temple's role

Communal Space
A place for community people to organize functions, cultural program, workshops. Community people can create their own forum to maintain communal activities.

Small gathering around temple
A meeting area for trust people to maintain the place
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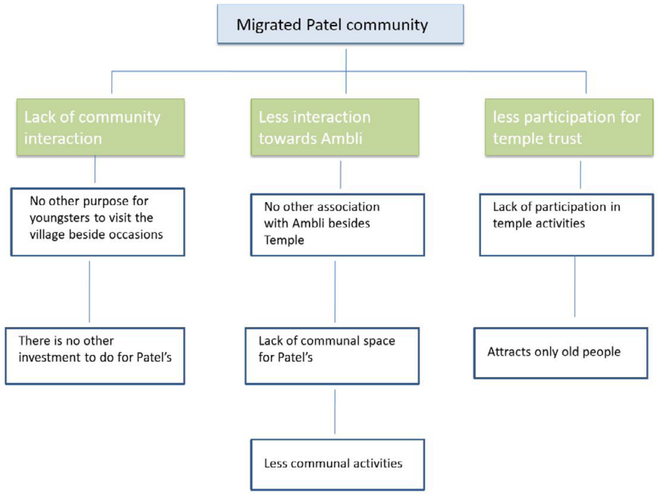


Strategic Plan

Problem tree :

1 ONE OF THE OLDET TEMPLE USED MOSTLY BY PATEL COMMUNITY

2 MOST ACTIVE PATH USED BY ALL RESIDENTS OF VILLAGE AND PEOPLE WHO ALL LIVE NEAR BY TO THE AMBLI VILLAGE

3 KHODIYAR TEMPLE IS OWNED BY PATEL COMMUNITY AND ACTIVLY USED BY THEM ALSO

4 THE SITE IS JUST BESIDE THE GANPATI TEMPLE AT THE EDGE OF THE AMBLI LAKE

Site Analysis :

Community Engagement

The community engagment was held at two different locations, one at Ganpati temple and Second at Khodiyar temple. The user group who took part in the design consultation were from trust Mandal of both Temples and belong to Patel community.

when the design was introduced to them they ere quite positive about the design and implimentation for this particular place. On the other side they were concern about 'Mandapa' for temple activities also the open space in front of the temple.

The main discussion was carried out about how the temple activities will take place and how the peoject will respond to the temple primises.

A B

A' B'

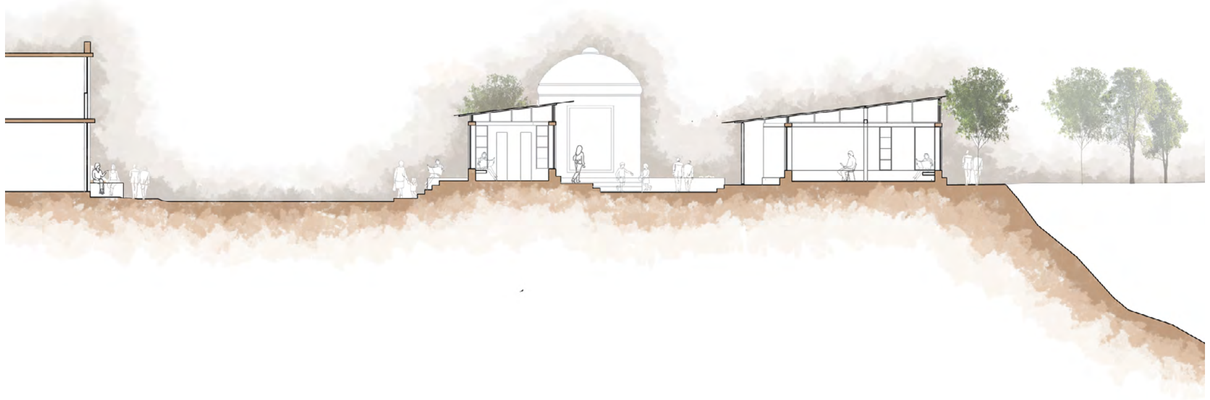
PLAN
SCALE 1 :100

This program has different stakeholders at different times where the primary stakeholder are people from Patel trust. The secondary stakeholders will be the Patel community and AMC. Residents of the village and people who are living around the village are tertiary stakeholders. In four certain phases, the project will execute by them with a probable timeline and funding where the involvement of stakeholders will take part according to their necessity and position.

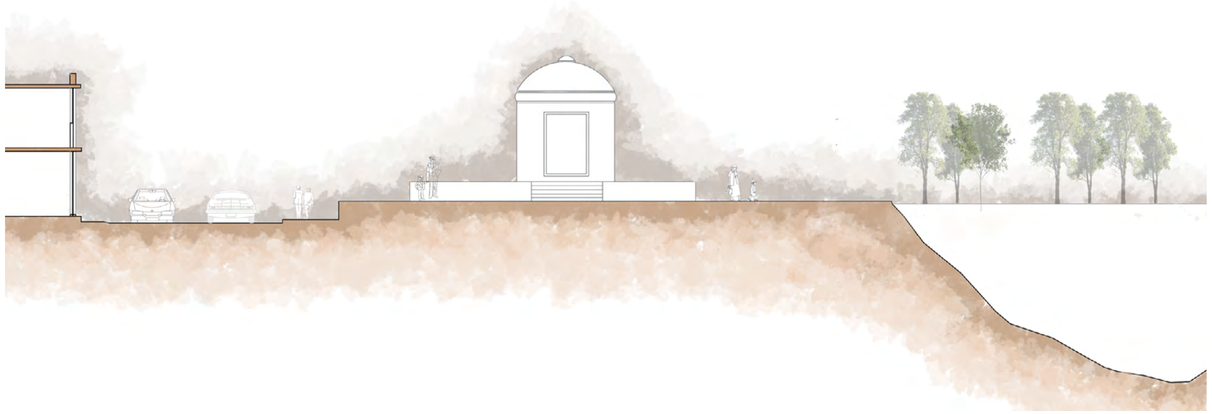
The initiation of this place will start with communal activities which could encourage people to use the library and other surroundings. Bookstore and public space on the lake edge will be helpful to the tertiary user group. The management of the place will be done by trust people.

The perception for the future is that this project will give good opportunities to people who are still associated with Ambli village. It will maintain the consistency of the communities and the intergeneration gap where intergeneration activities will play a major role. The investment of time and funding of a Particular community will revive their sense of belonging towards the Ambli village

Front Elevation
Scale 1 : 100



Section AA'
Scale 1 : 100



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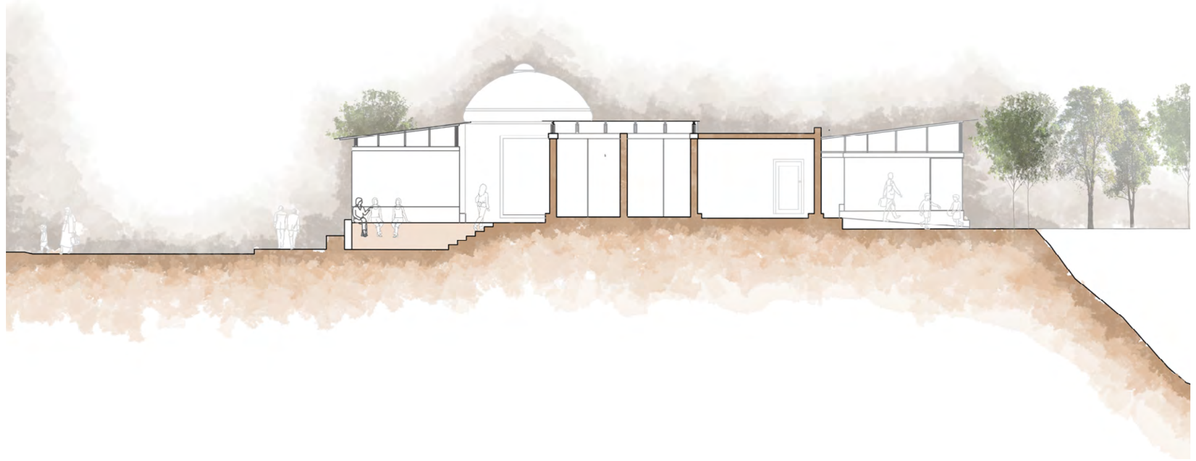

Section BB'
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