ARCHITECTURE THESIS

THESIS REPORT

URBAN ESCAPE-Community Of Eco -Habitats - Bangalore

A Thesis Submitted
in Partial Fulfillment of the
Requirements for the Degree of

BACHELOR OF ARCHITECTURE

DESIGN BY

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Under the Supervision of

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To The

School of Architecture And Planning

BABU BANARASI DAS UNIVERSITY
LUCKNOW

SESSION

2022-23

JUNE
2023

ARCHITECTURE THESIS

CERTIFICATE

I hereby recommend that the thesis, entitled **"URBAN ESCAPE-Community Of Eco -Habitats"**, prepared by

MR.ABHISHEK BARDHAN

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under my supervision, is the bonafide work of the student and can be accepted as a partial fulfilment for the award of Bachelor's Degree in **ARCHITECTURE**

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Recommendation:

Accepted

Not Accepted

External Examiner

External Examiner

JUNE
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BABU BANARASI DAS UNIVERSITY, LUCKNOW

CERTIFICATE OF THESIS SUBMISSION FOR EVALUATION

1. **Name :** **ABHISHEK BARDHAN**
2. **Roll No. :** **1180101003**
3. **Thesis Title:** **URBAN ESCAPE-Community Of Eco -Habitats Bangalore**

Degree for which the thesis is submitted:

……

1.	**Faculty of University to which the thesis is submitted:**	**Yes / No**
2.	**Thesis preparation guide was referred to for preparing the thesis.**	**Yes / No**
3.	**Specification regarding thesis format have been closely followed.**	**Yes / No**
4.	**The content of the thesis have been organized based on the guidelines.**	**Yes / No**
5.	**The thesis has been prepared without resorting to plagiarism**	**Yes / No**
6.	**All the sources used have been cited appropriately**	**Yes / No**
7.	**The thesis has not been submitted elsewhere for a degree.**	**Yes / No**
8.	**Submitted 3 hard bound copied plus one CD**	**Yes / No**

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AR. SAURABH SAXENA

THESIS GUIDE

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…….

Name : ABHISHEK BARDHAN

Roll No - 1180101003

JUNE 2023

ACKNOWLEDGEMENT

"In the name of god Who is most beneficient and merciful."

Time demands that I express my gratitude to those who have been a part of my stay in **B.B.D.U**. It's been great, all these years, but life moves on…and so do we…

I express my deepest gratitude to my thesis guide **AR. SAURABH SAXENA**, for his valuable dispassionate guidance, critical discussions, suggestions and continuous support all through my INTERIOR THESIS.

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Thank You' was not the exact phrase on my mind when I wrote this, it was something much deeper, but I am unable to find words for it.

All of my teachers, your support, encouragement and guidance have given us the strength to embark on this rigorous journey.

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It would not be possible without my Junior especially ADITYA RAJ

Though words hardly express the true emotions, still I would like to thank all my near and dear ones who helped and guided me.

PART 1: DESIGN INVESTIGATION

CHAPTER 1.0 – INTRODUCTION
- INTRODUCTION
- SYNOPSIS

CHAPTER 2.0 – SITE ANALYSIS AND CLIMATIC DATA
- INTRODUCTION
- ABOUT CITY
- LOCATION OF SITE
- SITE ACCESSIBILITY
- SITE IMAGES
- CLIMATE DATA WITH SUN MOVENMENT

CHAPTER 3 – CASE STUDY
CASE STUDY 1 : Rurban Nest , Hyderabad

CASE STUDY 2 : Naandi , Hyderabad

CHAPTER 4 – LITERATURE STUDY
- LITERATURE STUDY 1 : **NBC STANDARDS**
- LITERATURE STUDY 2 : **BANGALORE MAHANAGARA PALIKE BUILDING BYE-LAWS**

PART 2: DESIGN TRANSLATION

CHAPTER 5 - DESIGN IDEATION
- CONCEPUALIZATION OR THEME
- BUBBLE DIAGRAM
- ZONING

CHAPTER 6 - DESIGN EVOLUTION
- DEVELOPNMENT OF DRAWINGS
- ELEVATIONS
- SECTIONS
- 3D VIEWS

CHAPTER 7 - ELECTIVE
- PLUMBING
- LANDSCAPE

CHAPTER 1: INTRODUCTION

What we think when we hear "What is a Home"

URBAN ESCAPE-COMMUNITY OF ECO -HABITATS

- The Urban Escape" design brief aims to explore innovative & sustainable housing ideas wherein earth , water , food , air and vegetation are considered as the elements of the project. Let us all try to bring a change and create a new category of housing which has all the features of an "Urban" home but at the same time the community experience is "Rural".

- Home – A place to unwind yourself , a space where your mind & body are at ease or an enclosure where one feels safe. Pretty simple ? Nooo. A home should not be just merely a composition of geometrical forms with a contemporary façade & few greens here and there. It should have spaces that can evoke your feelings both tangible & intangible , a composition of space that is strong enough to play different roles as per the use of individuals , an enclosure that has a perfect mix of open, semi-open & closed spaces. Big or small for everyone their home is the best & it is the way it should be but the pandemic completely changed the image of a contemporary home we use to had in our mind.

- Continuous lockdowns forced people to stay indoors in their homes for weeks. If you look at this problem of staying indoor in an urban home , architecturally you will find that people were actually packed inside a box rather than their homes. As we all know homes in urban areas lack in terms of connect with outdoor areas , natural light & ventilation & a very minimum space to move around. Rapid urbanization has only forced us to live with polluted environments & has led us to a stressful life.

- In order to overcome the hustle & bustle of urban lifestyle what people tend to do is go on a vacation for a few days in some environment friendly stays to get themselves rejuvenate but the fact is that it is a temporary solution. Instead of finding ways to escape & relax can we have a gated community wherein each home is in balance with the eco system & the entire community has an access to abundance of natural air , organic food , clean water & is packed with all the sustainable features ? It is for this reason we have curated this brief to think & design a community of Eco-Habitats.

BACKGROUND & HISTORY

Bangalore is the capital city of the state of Karnataka. Bangalore, as a city, was founded by Kempe Gowda I, who built a mud fort at the site in 1537. But the earliest evidence for the existence of a place called Bangalore dates back to c. 890.

The modern-day desire for community was notably characterized by the communal "back to the land" movement of the 1960s and 1970s through communities such as the earliest example that still survives, the Miccosukee Land Co-op co-founded in May 1973 by James Clement van Pelt in Tallahassee, Florida. In the same decades, the imperative for alternatives to radically inefficient energy-use patterns, in particular automobile-enabled suburban sprawl, was brought into focus by recurrent energy crises. The term "eco-Habitats" was introduced by Georgia Tech Professor George Ramsey in a 1978 address, "Passive Energy Applications for the Built Environment", to the First World Energy Conference of the Association of Energy Engineers, to describe small-scale, car-free, close-in developments, including suburban infill, arguing that "the great energy waste in the United States is not in its technology; it is in its lifestyle and concept of living.

Green Building Concept and Architecture Planning

1.To have Green Building Concept, we should look after the following:Optimum use of Energy or power
2.Water conservation
3.Solid and Water Waste management, its treatment and reuse
4.Energy efficient transport systems
5.Efficient Building System Planning etc.

The Green Building movement in India was started in 2003 and received a major impetus when, CII –sohrabji Godrej Green Business Centre Building in Hyderabad became the first green building in India which was awarded with the prestigious and the much covered LEED (Leadership in Energy and Environmental Design) Platinum rating by the US Green Building Council (USGBS) and also became the world's greenest Building in 2003.

CHAPTER 2: SITE ANALYSIS

URBAN ESCAPE-COMMUNITY OF ECO -HABITATS

INTRODUCTION

The Urban Escape" design brief aims to explore innovative & sustainable housing ideas wherein earth , water , food , air and vegetation are considered as the elements of the project. Let us all try to bring a change and create a new category of housing which has all the features of an "Urban" home but at the same time the community experience is "Rural".

A community of Eco Habitats

The idea of an eco friendly community where people grow fresh food together on community and neighbourhood levels. A green, senstive, social and happy society where the interaction of humans and nature will help nourish people and flourish nature.

A series of interdependent BIOCHEMICAL. SOCIAL and BUILT environments interacting at various levels trying to recreate the quality of a village life with the ammenities of a city.

A sense of vast fields and navigating water finally leading to a congregation space which belongs to nobody yet owned by the nature and the people. Taking inspiration from Bangalore - a city of forgotten lakes which meets the mountains on the South.

What is the meaning of eco habitat.

An integrated eco-system as a living space, consciously created with sustainability principles at its core; designed for having a minimal impact without contaminating the environment in or around it.

Why Bangalore is called green city of India?

Located on the Deccan Plateau, at a height of over 900 m (3,000 ft) above sea level, Bangalore has a pleasant climate throughout the year, with its parks and green spaces earning it the reputation as the "Garden City" of India. Its elevation is the highest among the major cities of India

Why We Want To Host You At Eco Habitat

You will get to stay in uniquely designed villas with private pools with access to entire farm. Kindly talk to our main chef for cuisine options. We'll supply you with fresh , farm sourced greens and spices. We want you to spend your time blending with the natural surroundings, Coorg s cultural heritage, and engage with local economy.

Your stay with us will not just be a 'STAY' but a 'life time experience' of what it means to go back to nature. We want to ensure a complete harmony between the wandering souls of our visitors and the nature that is Eco Habitat.

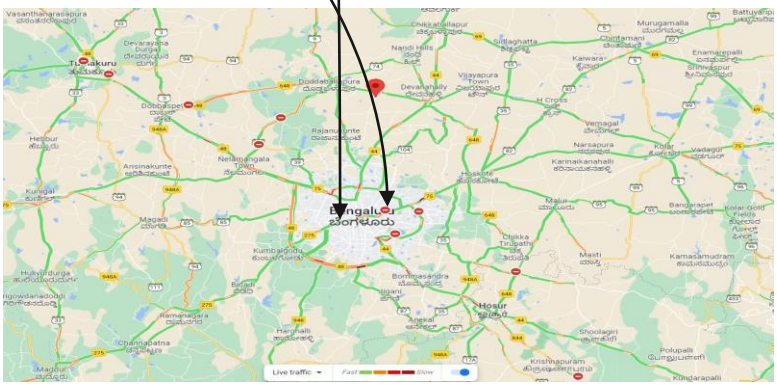
The design and elements of sustainable living are the core of Eco Habitat farm, demonstrating garbage and waste management, biogas plants, solar energy, organic farming, natural plantations and indigenous species.

SITE LOCATION :

Bangalore , India

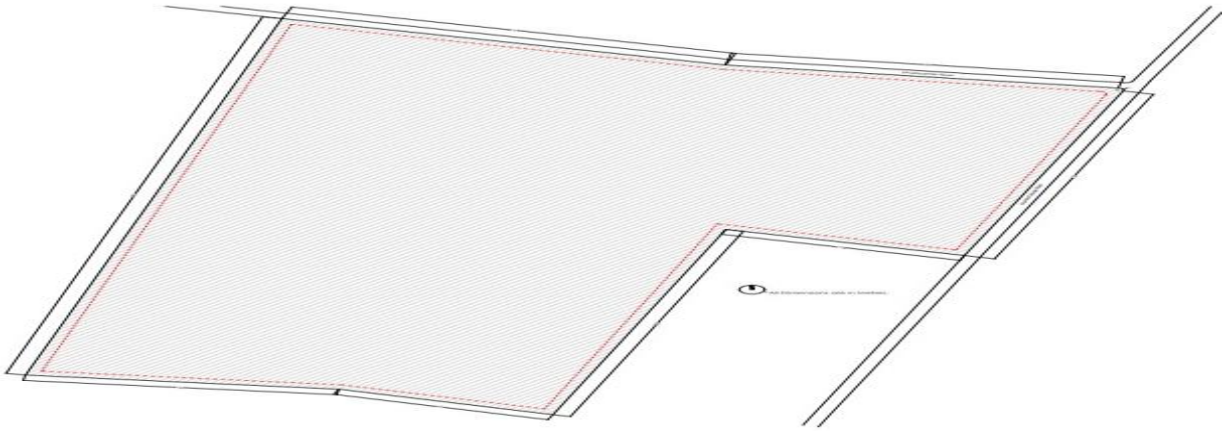
- The site is located in the outskirts of the Bangalore city. Located at the junction of Adarsha College Road & Duddanahalli Road , the site is surrounded by open farms lands.

LANDMARK



SITE COORDINATES :
13° 16’11.18", 77°37’4.54"

Bangalore Airport 18.0 KM	Railway Station 21.0 KM	Bus Station 20.0 KM



SITE DRAWING

SOIL ANALYSIS

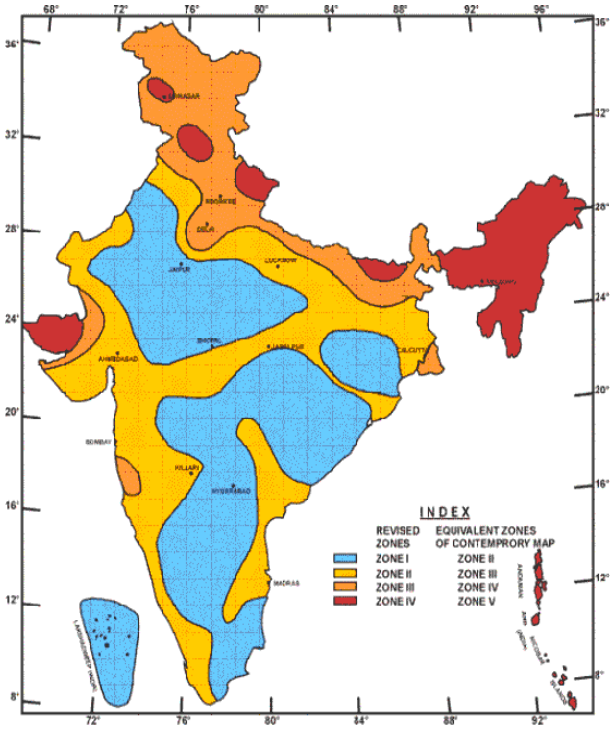
- The soils of the districts can be broadly grouped into **red loamy soil and lateritic soil**. Laterite soils occur on undulating terrain forming plain to gently sloping topography of peninsular gneissic region.
- Red loamy soils generally occur on hilly to undulating land slope on granite and gneissic terrain. It is mainly seen in the eastern and southern parts of Bangalore north and south taluks
- Laterite soils occur on undulating terrain forming plain to gently sloping topography of peninsular gneissic region. It is mainly covered in Anekal taluk and western parts of Bangalore North and south taluks.

Source : cgwb.gov.in

- EARTHQUAKE ZONE

Coastal and northern-interior districts bordering Maharashtra are in Zone III, and the rest, including Bengaluru, lie in Zone II.In the recent studies, several active faults have been identified in Chitradurga, Bhatkal, Udupi and Bengaluru region

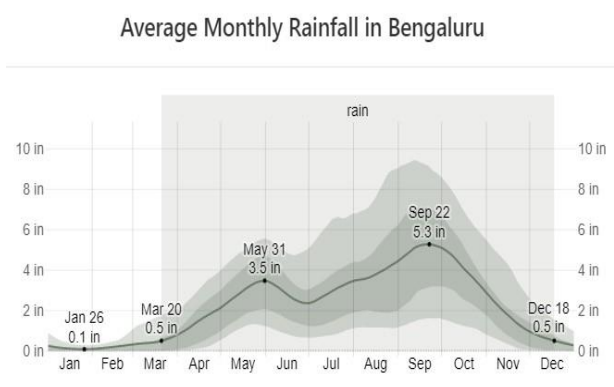
The last time Bengaluru suffered an earthquake was on January 29, 2001, whose magnitude was 4.3 on the Richter scale.

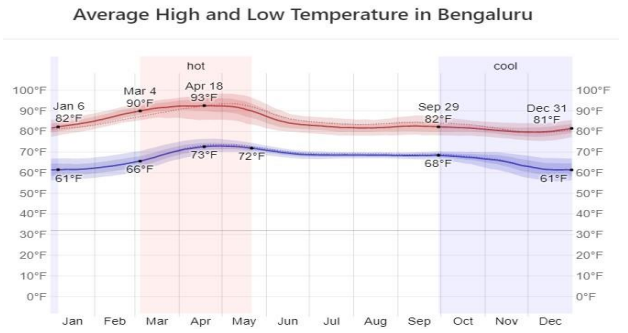


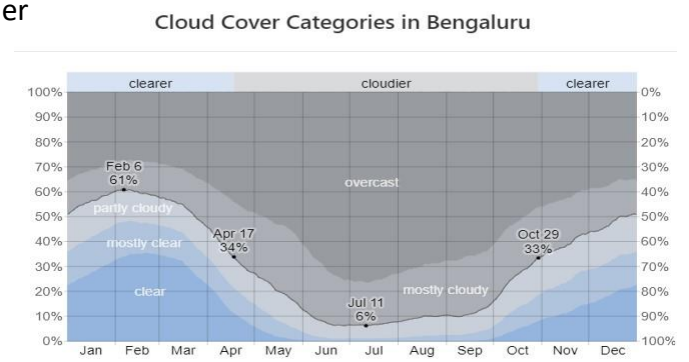
Source : cgwb.gov.in

CLIMATIC DATA

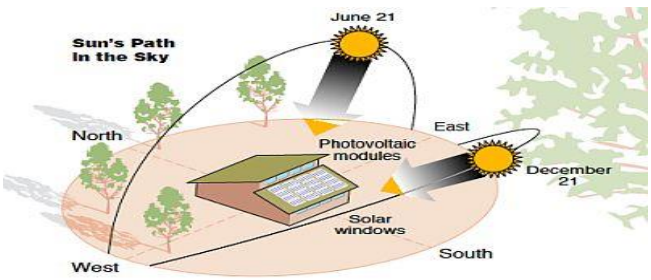
- Climatic condition –The Bengaluru Division has Tropical Monsoon climate. The tropical monsoon climate is the intermediate climate between the tropical rainforest climate and the tropical savanna climate.
- Percipitaion- heavy-avg.3000mm/year every year
- Temperature-21-33 deg celsius
- Rel.Humidity -65%-70%
- Predominant wind direction –from south west to north east
- High temperature
- High humidity
- Heavy precipitation
- The proximity of the waterbodies contributing to this. The diurnal variation of temperature seldom exceeds 100 C.
- The district receives the benefit of the two monsoons as in the case of other parts of the state.
- Hot season - march to may
- South-west monsoon - june to september north-east monsoon - october to november
- Dry weather - december to february

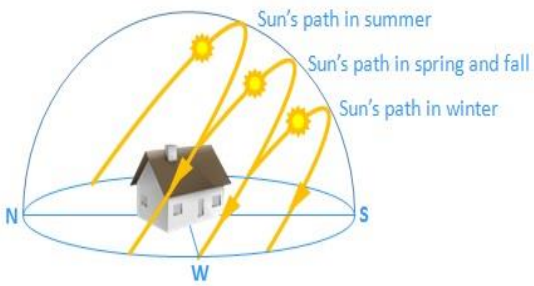






SUN PATH





SWOT ANALYSIS

- STRENGTHS-The presence of a huge green area on one of the site

  The presence of the green line between the land

  and the industrial area

- The soil is suitable for agricultural use

  The site is near to most of the facilites

- WEAKNESSES- Water Shortage, Waste management.

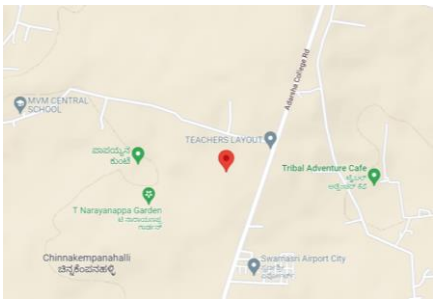
- OPPORTUNITIES – Extending the transportation lines to the site-Existing views from Potential to connect high-density and low-density residential areas.

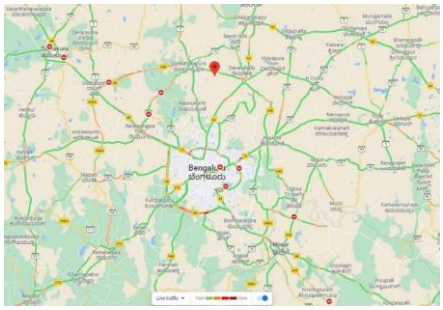
  Flat land to shape according to the design

  The main road and the existing green areas.

- THREATS – NATURAL DISASTER

TOPOGRAPHY

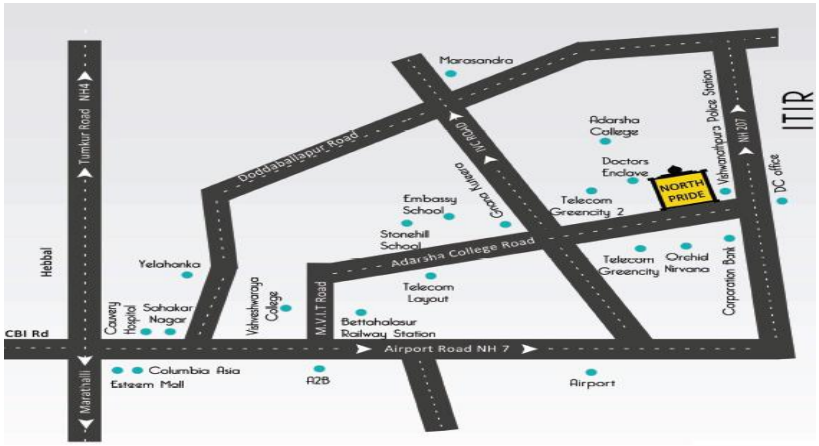




SITE PHOTO

SURROUNDING

- Adjacent to NH 207
- Opposite to rural DC office and proposed ITIR Project
- Just 21 km from Hebbal
- Corporation bank Kundana branch on NH 207
- Nearby Gyana Kuteera
- 20 mins drive to Nandi Hills
- Close to Stonehill International School
- Close to Adarsha Institute of Technology
- SBI bank on NH-207



NEAR BY LOCATION

Innovative Film City

There is no dearth of fun things to do in Bangalore, especially for the chillar party out there. Sitting on the Bangalore-Mysore highway at Bidadi, Innovative film city is a spot that has plenty of activities lined out for families to enjoy including net cricket, Bull ride, go-karting, boating, and more. Film City also offers refreshing water pools that have ample fo activities including Dino Park, Haunted Mansion, Fossil Museum, and much more.
Famous for: Net Cricket, Go-Karting, Bull Ride, Wave Pool
Distance from Bangalore: 40 km
Travel Time: 1 hour
Places To Stay: SaffronStays Maleya Manor, Maruthi

Ramnagar Wine Yard

AnoRamnagar Wine Yard is that one land that reeks of sweet fragrances from the vineyards. The experience in this vineyard is categorized into three activities including getting an insight into the history of wine, strolling around the wineyard and witnessing the production process, and finally the bottling. The best part about this tour is definitely tasting the finest wines that come from both France and India at the end of this tour.
Famous for: Wine tour
Distance from Bangalore: 8 km
Travel Time: 20 minutes
Places To Stay: Shilhaandara Resort, Baevu- The Village, ther one of the **happening places in Bangalore**,

Bannerghatta National Park

One of the most popular tourist places near Bangalore, Bannerghata National Park is a biological reserve with pet corner, zoo, butterfly enclosure, animal rescue centre, safari park and snake house. In addition to that Bannerghatta captivates with its ancient temples, and is a popular destination preferred for hiking and trekking in the list of best places to see near Bangalore.
Famous for: Wildlife, nature
Distance from Bangalore: 36 km
Travel Time: 1 hour
Places To Stay: THE Meenakshi Resorts, Suggee Resort, Flamingos Service Apartment,

Nandi Hills

Nandi Hills or Nandidurg is one of the most popular **one day trip near Bangalore**. This ancient hill fortress is famous for trekking. This place derives its name from the stunning statue of Nandi (the bull) at the doorstep of Yoganandeeshwara Temple. You can view the beautiful sunrise from the hilltop and also visit other places like Muddenahalli and Amrita sarovar.
Famous for: Hills, Trekking, Sunrise
Distance from Bangalore: 62 km
Travel Time: 1 Hours 18 minutes
Places To Stay: Hotel Mayura Pine Top Nandi Hills, Mount Palazzo, Nandi cottages near Nandi HillS, Aiyaana The Hills

Ranganathaswamy Temple

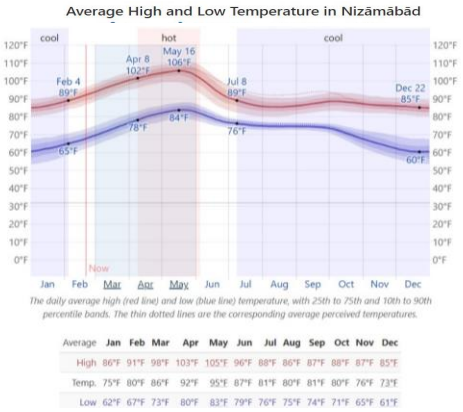
Located in the town of Magadi, Ranganathaswamy Temple is an ancient temple that is visited by pilgrims in huge numbers. The history of the Chola temple is as old as the 12th century and holds great importance in the lives of people. Inside the temple, you will find a 3-feet tall standing image of Narayana which is unique because usually, the idol is always in resting position. The beautiful pillars inside the temple are constructed in the style of Dravidian architecture.
Famous for: Heritage
Distance from Bangalore: 54 km
Travel Time: 1 hour 36 min
Places To Stay: Haritham, Jyothi Suites, ad hoc, Shri Subham Residency, Vignesh Residency

CHAPTER 3 – CASE STUDY

1:Rurban Nest, Hyderabad

CLIMATE: Tropical wet and dry or savanna climate
TOTAL SITE AREA: 9.2 Acres Area
2 Acres Farming Area
22 Farm Units
Project Name: Rurban Nest
Location: Bardipur, Nizamabad
Site Area: 9.025 acres – 36,522 sqm
Built-Up Area: 18,516 Sqm.
Client: Rurban Nest,Organo
Project Team: Mathan Ramaiah, Nikhil Chakravarthy,Prem Swarup, Bhanu Teja

CLIMATE



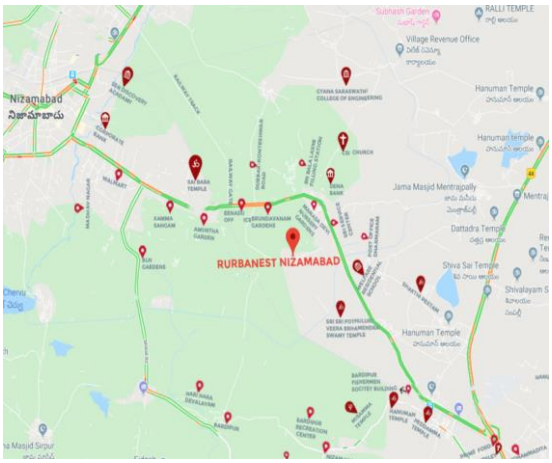
Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High	86°F	91°F	98°F	103°F	105°F	96°F	88°F	86°F	87°F	88°F	87°F	85°F
Temp.	75°F	80°F	86°F	92°F	95°F	87°F	81°F	80°F	81°F	80°F	76°F	73°F
Low	62°F	67°F	73°F	80°F	83°F	79°F	76°F	75°F	74°F	71°F	65°F	61°F

Project Description

The Nest, Nizamabad is an all inclusive sustainable habitat located in Bardipur, 10km away from Nizamabad city. It has 22 farm units with a clubhouse and around 2 acres of undivided farm area. There are 9 west facing units, 8 east facing units and 5 north facing units designed exclusively for like minded people who wants to live close to nature. Few other pointers are attached.

Rurban Nest is a collective effort towards creating a rurban eco-habitat in Nizamabad on net-zero and triple bottom line principles under the mentorship and guidance of Organo. Situated 5 km away from Urban Nizamabad near Bardipur village, Rurban Nest aims to be a conscious community and opportunities to work with nature and experience - a combination of urban refinement and rural ethnicity.

Location



The weather is hot-
from Apr to Jun;
the average maximum temperature Is 106° F (40 °C) and average minimum is 80°F (26 °C) .

The weather is Warm-
from Feb, Mar, Jun to Nov;
the average maximum temperature is 92°F (33 °C) , the average minimum is 72°F (22 °C) .

The weather is Cold-
from December to Feb;
the average maximum temperature is 84°F (28 °C) , the average minimum is 57°F (13 °C)

The district's yearly temperature is 30.03°C (86.05°F) and it is 4.06% higher than India's averages. Nizamabad typically receives about 152.73 millimeters (6.01 inches) of precipitation and has 126.09 rainy days (34.55% of the time) annually.

SITE PLAN

Amenities & Attractions

Solar Conservation

Bio-Pool

Organic Farming

Goshala

Outdoor Space

Yoga Deck

Indoor Badminton Court

Multipurpose Hall

Play Area

Gym

FLOOR PLAN

EAST FACING
GROUND FLOOR PLAN

EAST FACING
FIRST FLOOR PLAN

Area Statement

		Built-up Area	Carpet Area
Ground Floor		163.17 sqm/ 1756 sq. ft.	142.94 sqm / 1539 sq. ft.
First Floor		161 sqm/ 1733 sq. ft.	106.47 sqm / 1146 sq. ft.
Parking and Back Porch)		54.87 sqm/ 591 sq. ft.	
Total Built-up Area		**379.04 sqm/ 4080 sq. ft.**	**249.41 sqm/ 2685 sq. ft.**

NORTH FACING
GROUND FLOOR PLAN

NORTH FACING
FIRST FLOOR PLAN

Area Statement

		Built-up Area	Carpet Area
Ground Floor		167 sqm/ 1799 sq. ft.	154.34 sqm / 1661 sq. ft.
First Floor		174 sqm/ 1873 sq. ft.	118.05 sqm / 1271 sq. ft.
Parking and Back Porch)		28 sqm/ 303 sq. ft.	
Total Built-up Area		**369 sqm/ 3975 sq. ft.**	**272.39 sqm/ 2932 sq. ft.**

WEST FACING
FIRST FLOOR PLAN

WEST FACING
FIRST FLOOR PLAN

Area Statement

		Built-up Area	Carpet Area
Ground Floor		155 sqm/ 1664 sq. ft.	141.03 sqm / 1518 sq. ft.
First Floor		160 sqm/ 1722 sq. ft.	105.57 sqm / 1136 sq. ft.
Parking and Back Porch)		60 sqm/ 643 sq. ft.	
Total Built-up Area		**375 sqm/ 4029 sq. ft.**	**246.60 sqm/ 2654 sq. ft.**

VILLAS SPECIFICATION

GRANITE
Staircase Flooring : Granite Flooring
Staircase Flooring : Granite Flooring

SOLAR PANELS : 11KW
Conduiting : Sudhakar PVC
Wiring : Polycab FRLS
Switches and Sockets : Legrand or Panasonic
Ceilling Lights : Phillips or Panasonic
Fans : Crompton Greaves (White)
Energy Meter : As specified by TS TRANSCO
Electrical DB + MCB : Legrand
Video Door Phone : Grand Stream or Equivalent
Solar Water Heater : Solarizer or Equivalent

PLASTERING
External Walls : 20 mm thk Plastering With CM 1:6
Internal Walls : 12 mm thk Plastering With CM 1:4

STRUCTURE
Sub Structure : RCC Foundation Frames With Plinth
Beam
Super Structure : RCC Columns Beams & Slabs

BLOCKWORKS
External Walls : 8" Blockwork at External
Internal Walls : 4" Blockwork at Internal

FLOORING
Foyer/Living/Dining/Puja/ : Vitrified Floor Tile & Skirting
Kitchen/Bedrooms Size 600 * 1200 mm
Dressing/Store/Utility : Vitrified Floor Tile & Skirting
Size 600 * 600 mm
Bedroom toilets/PWD : Vitrified floor tiles
Room/Maid's toilet Size 300 * 300 mm
Study Room/ Deck : Wooden colour floor tile
in FF and skirting.
Size 600*600mm
Master Bedroom/ Dress : Laminated Wooden
Room/ WIC at First Floor Flooring & Skirting

MISCELLANEOUS
Portico Roofing (Back : Polycarbonate roofing with MS
Side) supporting structure without curtains
Louvers : Aluminium louvers with plain finish
Glass partitions : 10mm toughened clear glass with openable shutters (Only in master
bedroom toilet)

FALSE CEILING
Foyer/Bedrooms/ Dressing/ : POP False ceiling
Puja/Living/Dining/Kitchen/
Store - GF
Bedrooms/Dress/Study Room/ : POP False ceiling
Bar Counter area/WIC/ Staircase
area Top Slab - FF
Toilets/PWD Room/Maid's Toilet : POP False ceiling
In B/W Living & Fayer at GF & : POP False ceiling
Master Bedroom at FF

WATERPROOFING : Brush bond with screed and plaster finish
PAINTING WALLS
External Walls : Primer+ Texture + Ext. Emulsion(2 Coats)
Internal walls : Primer + Putty (2 Coats) +
Royal Emulsion
CEILING
Celing : Primer + Putty (2 Coats) +
Royal Emulsion

DADO/ CLADDING
Kitchen Dado : Ceramic Wall Tiles - Size 300 * 600 mm
(Height- 2)
Toilets/PWD : Ceramic Wall Tiles - Size 300 * 600 mm
Room (Upto CeilingHeight) (4Ft in Commode Area and Ceiling ht in Shower Area) 600 * 600mm
Maid's Toilet :Ceramic Wall tiles - Size - 300 * 300mm
(Upto Door Height)

THANDUR FLOORING
Villa Entrance/Back side : Rough Thandur Flooring
Deck in GF

CLUB HOUSE
TOTAL AREA : 12410 SQ.FT
STRUCTURE
Sub Structure : RCC Foundation Frames With Plinth Beam
Super Structure : Superstructure
Bamboo Structure : MS frame with thach over bamboo purlins
BLOCKWORKS
External Walls : 8" Blockwork at External
Internal Walls : 4" Blockwork at Internal
PLASTERING
External Walls : 20 mm thk Plastering With CM 1:6
Internal Walls : 12 mm thk Plastering With CM 1:4
WATERPROOFING : Brush bond with screed and
plaster finish
FLOORING
Guestrooms/Indoor games : Vitrified Floor Tile &
Skirting Size 600 * 1200 mm
Gym/Toilets-Walkway : Vitrified Floor Tile & Skirting
/Beside lift/Corridor FF Size 600 * 600 mm
Toilets/Store/Utility/Kitchen/ : Ceramic floor Tile and Skirting
Locker/Steam/Communication Size 300 * 300 mm
room/Electrical Room/Beside
Life face/ badminton/ Guest
room toilets
Deck area near : Wooden Floor Tile and skirting
swimming pool Size 600 * 600 mm
Bio pool/Swimming pool/ : Glass mosaic tile and cladding
Entrance water body
DADO/CLADDING
Kitchen dado : Ceramic wall tiles - Size 300 * 600 mm
(Height - 2)
Bedroom toilets/ : Ceramic wall tiles - Size 300 * 600 mm
PWD room (Upto Ceiling height)

JOINERY
Main Door : Teak frame and shutter with veneer finish
Staircase Railing : Polished Wooden railing supported by
MS structure with enamel matt finish

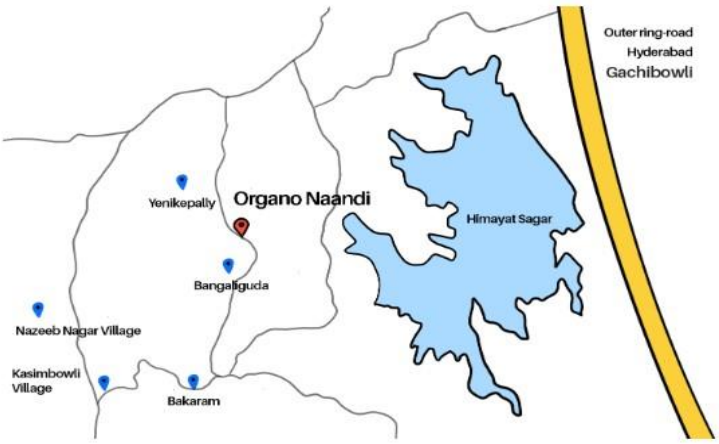
PLUMBING WORKS
CP / Sanitary Fittings : Villeroy & boch, Vitra
(Including Accessories)

DOORS/WINDOWS
Internal Doors : Granite frame + flush doors of 40mm thk with laminate
Door handles : Stainless steel matt finish
Door hinges : Stainless steel matt finish
Sliding doors : Aluminium + Glass Sliding Doors - Schucco
CW(UPVC Frame With : Aluminium
Fixed Glass)
Windows and :Aluminium
Ventilators

MISCELLLANEOUS
Internal Water Lines : CPVC-Ashirwad/ Astral
Sewage Lines : Astral/ Supreme as per design
Water meter : Aquamat or Equivalent

2:Naandi,Hyderabad

CLIMATE: Tropical wet and dry or savanna climate
TOTAL SITE AREA: 36.5 Acres Area
6.5 Acres Agricultural Land
10 Acres Afforested Land
73 Farm Units
Project Name: Naandi
Location: SITUATED AT KANDAWADA VILLAGE, CHEVELLA MANDAL, AZIZNAGAR
, RANGA REDDY DISTRICT.
Site Area:99198.625 sqm
Built-Up Area: 43516 Sqm.
Client: M.s Organo Eco Habitats Pvt. Ltd.



SITE PLAN

Organo's Naandi is located right in the middle of the lush green bio conservation zone of Hyderabad. Just 9 kms. from APPA Junction on the Himayath Sagar - Chevella Road, there can be no better location in the city that can so flawlessly align with Organo's vision.

CLIMATE

The district's yearly temperature is 30.03ºC (86.05ºF) and it is 4.06% higher than India's averages. Nizamabad typically receives about 152.73 millimeters (6.01 inches) of precipitation and has 126.09 rainy days (34.55% of the time) annually.

Average High and Low Temperature in Nizāmābād

The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.

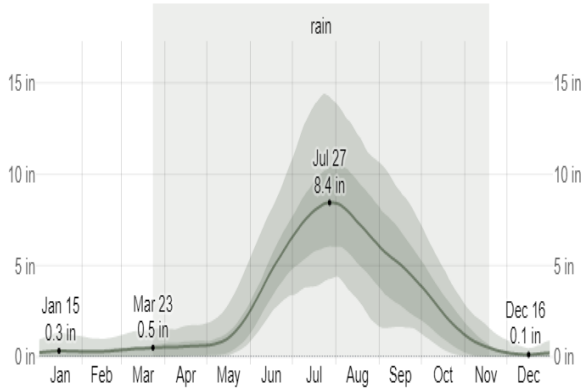
Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High	86°F	91°F	98°F	103°F	105°F	96°F	88°F	86°F	87°F	88°F	87°F	85°F
Temp.	75°F	80°F	86°F	92°F	95°F	87°F	81°F	80°F	81°F	80°F	76°F	73°F
Low	62°F	67°F	73°F	80°F	83°F	79°F	76°F	75°F	74°F	71°F	65°F	61°F

The weather is hot-
from Apr to Jun;
the average maximum temperature
Is 106° F (40 °C) and average minimum is 80°F (26 °C) .

The weather is Warm-
from Feb, Mar, Jun to Nov;
the average maximum temperature
is 92°F (33 °C) , the average minimum is 72°F (22 °C) .

The weather is Cold-
from December to Feb;
the average maximum temperature
is 84°F (28 °C) , the average minimum is 57°F (13 °C) .`

Average Monthly Rainfall in Nizamabad



Site and Surrounding:

Access from APPA Junction:

10 min. to Hitech City via ORR

20 min. to Shamshabad Airport

25min.toBanjaraHills/JubileeHills

15 min. to Gachibowli,Hitech City, Mehdipatnam

Within 10 min. radius:
PBEL City Pragathi Resorts Mantri Euphoria Jayabheri Enclave

2 BHK and 3 BHK HOUSES

TYPICAL FLOOR PLAN
2BHK
EAST FACING GROUND FLOOR

TYPICAL FLOOR PLAN
3BHK
EAST FACING GROUND FLOOR

TYPICAL FLOOR PLAN
2BHK
EAST FACING FIRST FLOOR

TYPICAL FLOOR PLAN
3BHK
EAST FACING FIRST FLOOR

Facing	Villa Numbers	Plot Area (Sq.Y)
North Facing	A1 – A 8	663.42
North Facing	B 1 – B 5	487.81
North Facing	C 1 – C 4	487.81
West Facing	A9	571.14
West Facing	A 10 – A 12	607.28
East Facing	A 13 – A 24	557.34
East Facing	B 6 – B 9	539.46
East Facing	C 5 – C 13	543.86
South Facing	A 25 – A 30	587.49
South Facing	A 31	696.61
South Facing	A 32 – A 36	627.47
South Facing	B 10 – B 14	
South Facing	C14	661.12
South Facing	C15	633.07
South Facing	C16	605.02
South Facing	C17	576.96
South Facing	C18	548.91
East Facing	A 19 – A 20	543.86

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Home Specifications

Structure and finishes

Structure
RCC and steel composite
Structure
Internal and external walls
Cement block walls of 200MM thick for external and 100MM thick for internal walls
Internal wall paint
Luppam (Birla NCI. Altech Putty finished, Acrylic Emulsion Paint (Asian Paints)
External wall paint
Putty Texture with external paint
Staircase
RCC structure with designer steel and Glass composite railing

HVAC
Air tunnel drafting using PVC pipes of standard make, with necessary dampers as per standard design along with necessary TEAs are provided. Also air conditioning unit of 41K VRV technology is provided.
Sewage treatment plant
A bio sewage treatment plant. DEWATS of capacity 1KLD is installed in rach villa to treat the waste water from the homes
Automation
Security of the bone being of paramount importance, the home is equipped for appliances like a Video desor phone. Close circuit cameras, bio-metric lock to the main door and intrusion alarm systems. Appliances at additional conts

Plumbing and bathroom fixtures

WCs, Bathtub, Tap/Other fittings
Toto/Kehler or equivalent make fixtures
Stainless steel sink
Single basin sink of Kaff or of equivalent make
Plumbing internal and external All water supply lines in CPVC pipes & waste water lines in joint less composite pipesi
Hot water
Solar het water supply of 200 litres capacity included
Water meter
Water meters are fitted into the house to meler the water consumption of each house

Flooring and dado

Verandah: Entrance deck, open shower Farm deck
Fire brick flooring/Tumbled natural stone flooring
Living Dining Study, Bed Rooms and kitchen
800X500 Vitrified Tiles/Natural stone
All toilets
Anti-skid designer ceramic tiles/ Natural stone
Terrace
Clay tiles
Staircase steps
Natural stone
*Flooring as per the designer's choice.

Doors and windows

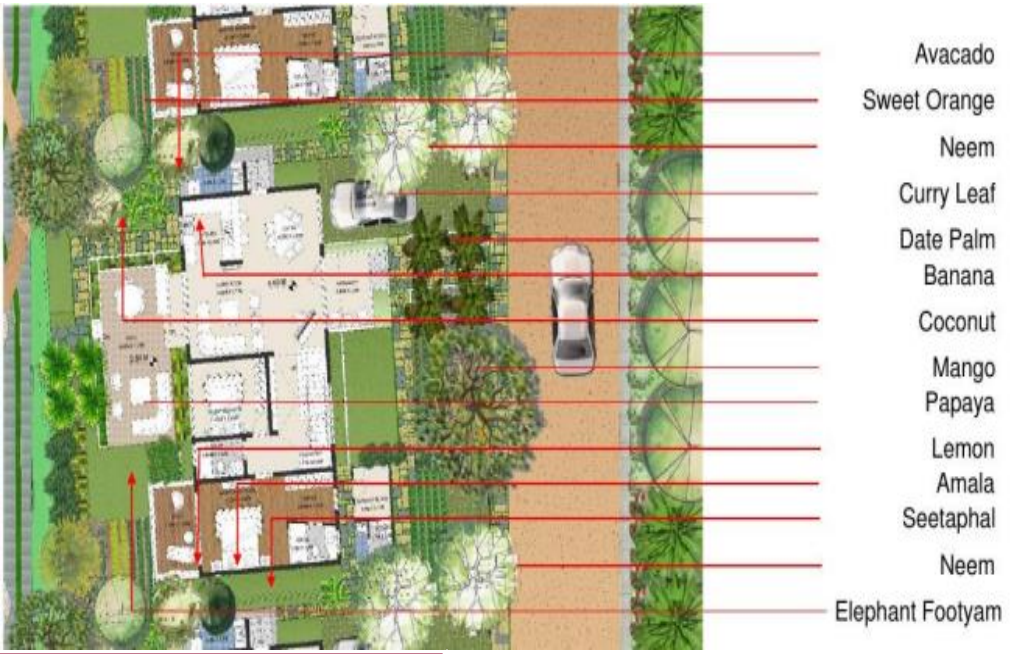
Entrance doors
Designer composite wooden door
Windows
Full height windows wherever required will be provided
Internal-doors- bathrooms
Flush doors
External Doors and window
LIPVC/ Aluminum sliding doors
Iron Mongri
Of standard make
"Installing grills is not permitted over any villas, the glass provided is toughened glass with provision for intrusion security system

Technology and Home Utilities

Power supply (electrical and communication system)
The wiring of the homes will be done with Finolex/ Polycab or equivalent make with Earth Leakage Circuit Breaker (ELCB) and Miniature Circuit Breakers (MCB) installed and Legrand or equivalent make switches.TV and Telephone points in the bedrooms and living room
Solar power system and hot water system
Solar panels of 240 Wp capacity are designed in the overall layout to deliver 0.5 MW of energy (overall), a mild steel structural system is designed to support.

Amenities & Attractions
Afforestation area

Herbal Garden
Collective farming
Personal farming
Goshala
Workshops and Informational events
Gym
Pottery
Bio-pool
Clubhouse
Guest Rooms
Pond
Community Events
Social Events
Board Games



CHAPTER 4 – LITERATURE STUDY

LITERATURE STUDY


COTTAGE HOUSE

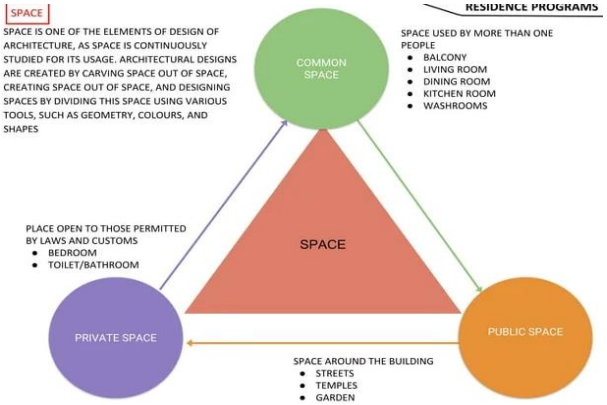
A RESIDENCE IS LIVING OR DWELLING IN CERTAIN PLACE PERMANENTLY OR FOR A CONSIDERABLE LENGTH OF TIME.A HOUSE IS A HOME, BUILDING OR STRUCTURE THAT FUNCTIONS AS A HABITAT FOR HUMAN OR OTHER CREATURES.


CONDOMINIUM

RESIDENTIAL BUILDING:

SPACE

SPACE IS ONE OF THE ELEMENTS OF DESIGN OF ARCHITECTURE, AS SPACE IS CONTINUOUSLY STUDIED FOR ITS USAGE. ARCHITECTURAL DESIGNS ARE CREATED BY CARVING SPACE OUT OF SPACE, CREATING SPACE OUT OF SPACE, AND DESIGNING SPACES BY DIVIDING THIS SPACE USING VARIOUS TOOLS, SUCH AS GEOMETRY, COLOURS, AND SHAPES



RESIDENCE PROGRAMS

SPACE USED BY MORE THAN ONE PEOPLE
- BALCONY
- LIVING ROOM
- DINING ROOM
- KITCHEN ROOM
- WASHROOMS

PLACE OPEN TO THOSE PERMITTED BY LAWS AND CUSTOMS
- BEDROOM
- TOILET/BATHROOM

SPACE AROUND THE BUILDING
- STREETS
- TEMPLES
- GARDEN

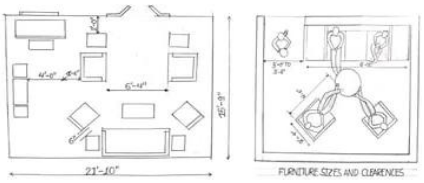
LIVING ROOM

LIVING ROOM IS A ROOM IN A RESIDENTIAL BUILDING FOR RELAXING AND SOCIALIZING.
PLACEMENT: NORTH EAST
STANDARD SIZE: 14 ft x 16 ft TO 18 ft x 24 ft
LIGHT: UPTO 500 LUX

SHOULD BE ORIENTED NEAR THE ENTRANCE — LIVING ROOM — LOCATION OF LIVING DOOR SHOULD ALLOW DIRECT ACCESS TO LIVING ROOM AS WE ENTER THE RESIDENCE

SHOULDN'T ALLOW THE VIEW OF PRIVATE SPACES LIKE KITCHENS, BATHROOMS.

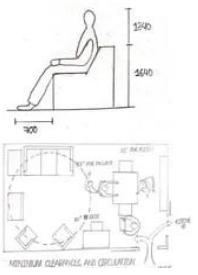
LAYOUT OF LIVING ROOM

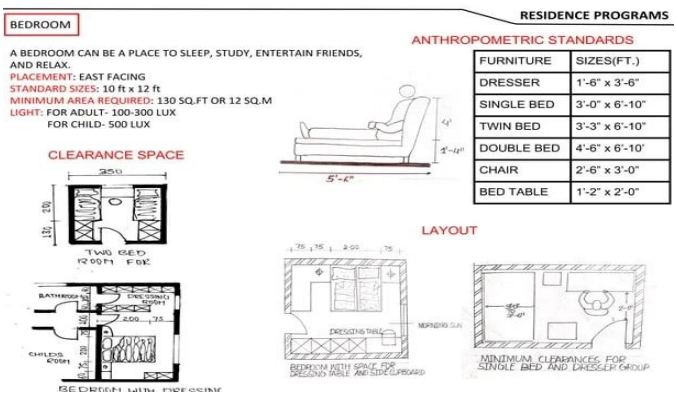


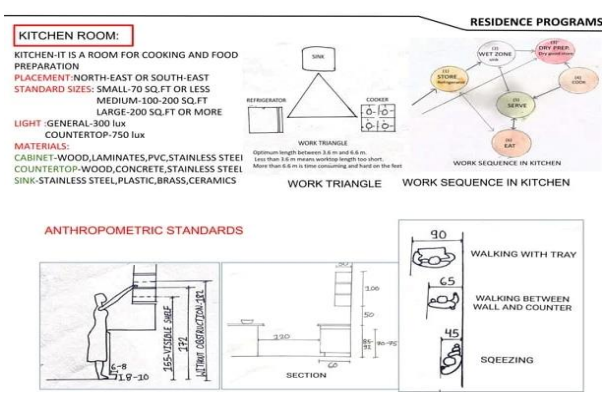
RESIDENCE PROGRAMS

ANTHROPOMETRIC STANDARDS

FURNITURE	SIZES (FT.)
SOFA	6'-0" TO 2'-6"
COFFEE TABLE	3'-0" TO 2'-0"
BOOK CASE	5'-0" TO 1'-6"
LAMP TABLE	2'-0"(DIA.)
DESK	5'-0" TO 2'-6"

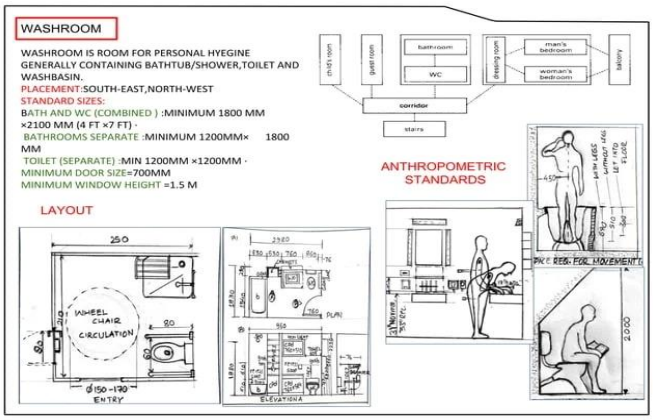


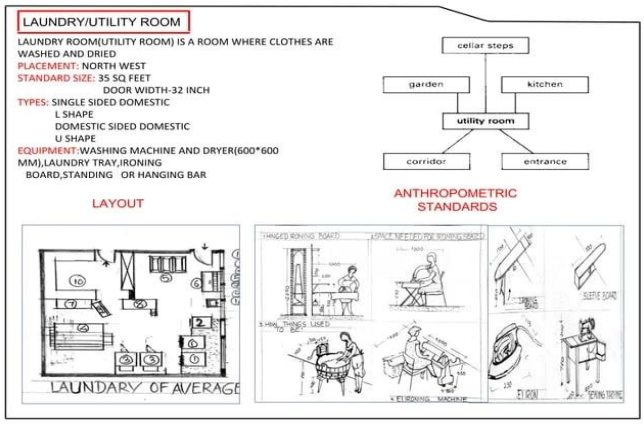


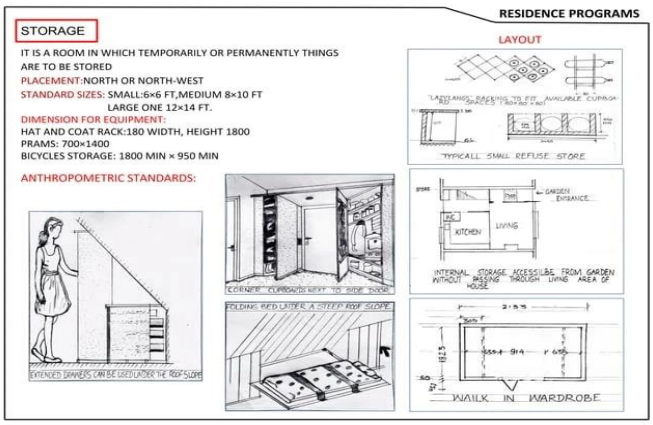


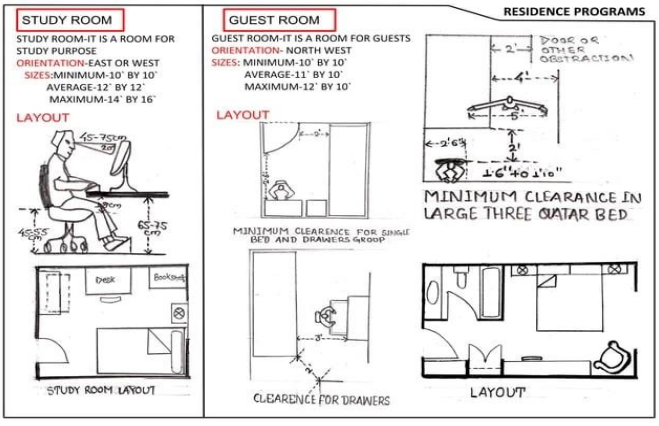
SUSTAINABLE FEATURESUSE OF PASSIVE SOLARSTRATEGIESRAIN WATER HARVESTING AND GROUND WATER RECHARGE• EARTHQUAKE RESILIENT DESIGN • OFF THE GRID RESIDENCE SOLAR CELLS FOR ELECTRICITY AND SOLAR WATER HEATING.PERMACULTURE• WASTE WATER MANAGEMENT AND RECYCLING• COST EFFICIENT AND MAINTENANCE COST IS LOW.INFERENCES-USE OF RAMMED EARTH TO CREATE CLIMATE RESPONSIVE AND ECO FRIENDLY ENVIRONMENT.NATURAL CROSS VENTILATION CREATING A COOL ENVIRONMENT.NATURAL SWIMMING POOL HAVING ITS OWN COOL MICROCLIMATE GIVE A WILD NATURE TO THE PREMISESUSE OF GREEN TECHNOLOGIES TO MINIMIZE AND RECYCLE WASTE, CONSERVE ENERGY, AND BECOME SELF-RELIANT.

BUILDING MATERIALS AND TECHNIQUES-THE MAJOR BUILDING MATERIALS USED ARE RAMMED EARTH,SUN DRIED BRICK, STONE,BAMBOO, STYROFOAM, GLASS WOOL, LINSEED OIL.INWALL SECTION OSOLLSTONE FOUNDATION IS LAID ABOVE WHICH CONCRETE BEAM IS CAST FOR DAMP-PROOFING.e 18 "THICK RAMMED EARTH WALLINSULATION AND VENTILATION IN ROOF.COB FLOORING FINISHES WITH FLOOR INSULATIONDOUBLE GLAZED UPVC DOORS AND WINDOWS.• PRECAST SLABS ON SILL (REAR WALLS) AND LINTELS FOR STRUCTURAL STABILITY.





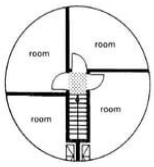




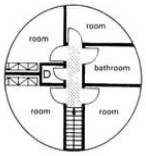
RESIDENCE PROGRAMS

GARDEN

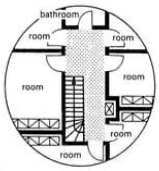
LANDING SPACE



100 CM² LANDING SERVING THREE LARGE ROOMS AT THE END OF STAIRWAY,NO CONTINUATION



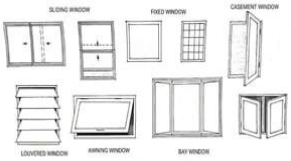
300 CM² LANDING SERVING FOUR LARGE ROOMS, A SMALL ONE (BATHROOM) AND A CLOSET



700 CM² LANDING SERVING SIX LARGE ROOMS AND ONE SMALL ONE

COMPONENTS

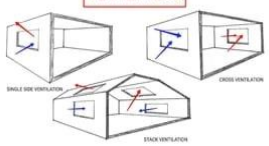
WINDOW



SPECIAL CASE OF VIEW WINDOW

STANDARD DIMENSION OF WINDOW:
WIDTH-101.6 CM - 320 CM, HEIGHT-91.44 CM - 198.12 CM

VENTILATIONS



MATERIALS:
- WOODEN: GOOD THERMAL PERFORMANCE, AESTHETIC, COSTLY
- GLASS:PROVIDE ENOUGH DAYLIGHT EVEN IF CLOSED
- METAL:GENERALLY STEEL, ALUMINIUM, LESS COSTLY,
- UPVC:MORE DURABLE, PROTECTION FROM NOISE

DOORS

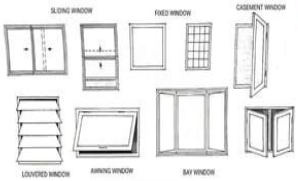
STANDARD DIMENSIONS OF DOOR:

MATERIALS
WOOD,FIBERGLAS,ALUMINIUM

HEIGHT	WIDTH
213.3 CM	91.44 CM
243.8 CM	106.68 CM
304.8 CM	100 CM

COMPONENTS

WINDOW



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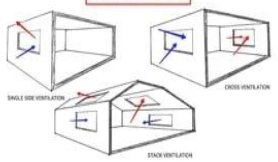

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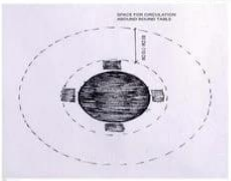
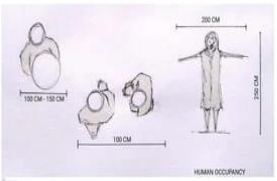
MATERIALS
WOOD,FIBERGLAS,ALUMINIUM

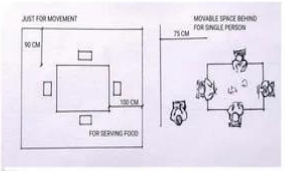
HEIGHT	WIDTH
213.3 CM	91.44 CM
243.8 CM	106.68 CM
304.8 CM	100 CM

CIRCULATION

NORMAL HUMAN OCCUPANCY FOR CIRCULATION IN VARIOUS SPACES:
- MOVEMENT FROM KITCHEN TO LIVING ROOM.
- MOVEMENT IN PASSAGE WITH VARIOUS NUMBER OF PEOPLE
- MOVEMENT BEHIND ANY CHAIR
- MOVEMENT AROUND ROUND TABLE
- MOVEMENT FOR SERVING FOOD



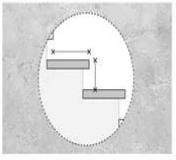




VERTICAL CIRCULATION

STAIRCASE ARE MODE OF VERTICAL CIRCULATION IN ANY BUILDING.
THE PURPOSE IS TO PERMIT PASSAGE FROM FLOOR TO FLOOR.

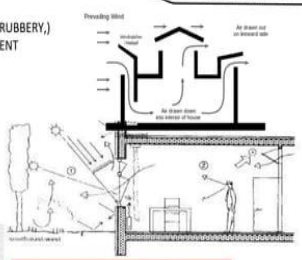
MINIMUM PROVISION:
RISER:15.24 CM
TREAD:25 CM
WIDTH:60 CM

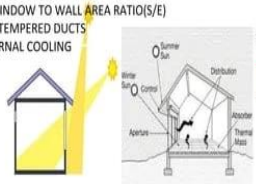


DAY LIGHTING

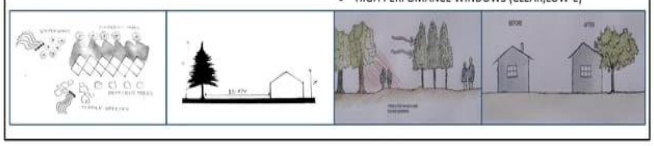
PASSIVE COOLING STRATEGIES
- SHADOWS AND COOLING DUE TO VEGETATION (TREES, SHRUBBERY,)
- SUN OR ANTI-GLARE PROTECTION (B = 35°) INSTALLED, EXTENT APPROX.

900MM
- ADEQUATE WINDOW SIZE (WITH INSULATING GLASS)
- FACADE IN BRIGHT REFLECTING MATERIALS
- LIGHT OR MEDIUM COLOUR FLOOR COVERING.
- CONSIDERATION OF HOUSE PLANTS
- CROSS VENTILATIONS
- STACKED WINDOW
- LOW WINDOW TO WALL AREA RATIO(S/E)
- EARTH TEMPERED DUCTS
- NOCTURNAL COOLING





PASSIVE HEATING STRATEGIES
- BUILDING ORIENTED USUALLY IN SOUTH AND WEST
- BUFFER SPACES AND DOUBLE FACADE
- MIXED-MODE HEAT RECOVERY VENTILATION
- LOW WINDOW TO WALL AREA RATIO(N/E)
- HIGH WINDOW TO WALL AREA RATIO (S/W)
- MINIMIZED INFILTRATION
- OPERABLE-EXTERNAL SHADINGS
- THERMAL MASS
- HIGH PERFOMANCE WINDOWS (CLEAR,LOW-E)



SUSTAINABLE FEATURES
- USE OF PASSIVE SOLAR STRATEGIES
- RAIN WATER HARVESTING AND GROUND WATER RECHARGE
- EARTHQUAKE RESILIENT DESIGN
- OFF THE GRID RESIDENCE SOLAR CELLS FOR ELECTRICITY AND SOLAR WATER HEATING.
- PERMACULTURE.
- WASTE WATER MANAGEMENT AND RECYCLING.
- COST EFFICIENT AND MAINTENANCE COST IS LOW.

INFERENCES-
- USE OF RAMMED EARTH TO CREATE CLIMATE RESPONSIVE AND ECO FRIENDLY ENVIRONMENT.
- NATURAL CROSS VENTILATION CREATING A COOL ENVIRONMENT.
- NATURAL SWIMMING POOL HAVING ITS OWN COOL MICROCLIMATE GIVE A WILD NATURE TO THE PREMISES.
- USE OF GREEN TECHNOLOGIES TO MINIMIZE AND RECYCLE WASTE, CONSERVE ENERGY, AND BECOME SELF-RELIANT.

CHAPTER 5 – DESIGN IDEATION

BIOPHILIC ARCHITECTURE

BIOPHILIC IS AN APPROCH TO ARCHITECTURE THAT SEEKS TO CONNECT BUILDING OCCUPPANTS MORE CLOSELY TO NATURE. BIOPHILIC DESIGN IS A CONCEPT USED WITHIN THE BUILDING INDUSTRY TO INCREASE OCCUPANT CONNECTIVITY TO THE NATURAL ENVIRONMENT THROUGH THE USE OF DIRECT NATURE & INDIRECT NATURE, SPACE PLACE CONDITION

.VISUAL CONNECT WITH NATURE

NATURAL OCCURING:- NATURAL ELEMENT, VEGETATION,NATURAL FLOW WATER, FRUIT BEARING PLANT

CONSTRUCTED GREEN WALL, ARTWORK DEPICTING NATURE.VERTICAL GARDEN

NON-VISUAL CONNECT WITH NATURE

NATURAL OCCURING- FRAGMENTS OF HERBS,FLOWING WATER

CONSTRUCTED AUDIBLE & PHYSICALLY ACCESSIBLE WATER,PLANT, TEXTURED MATERIAL.

PRESENCE OF WATER

FOUNTAIN, WATERWALL, REFLECTION OF WATER ON ANOTHERSURFACE

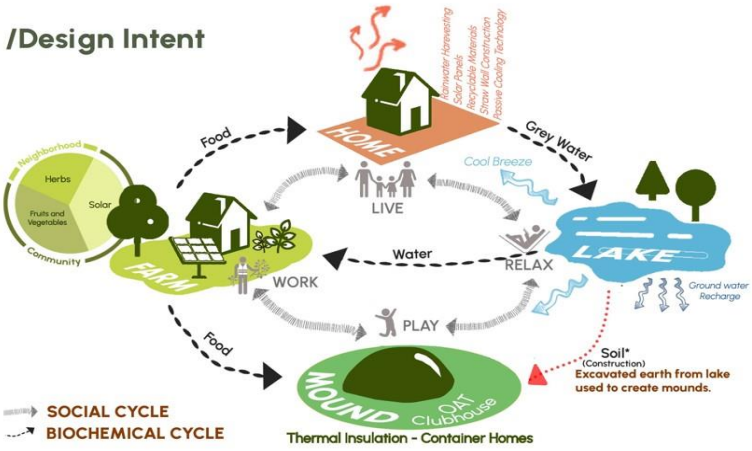
THERMAL AND AIRFLOW VARIABILITY

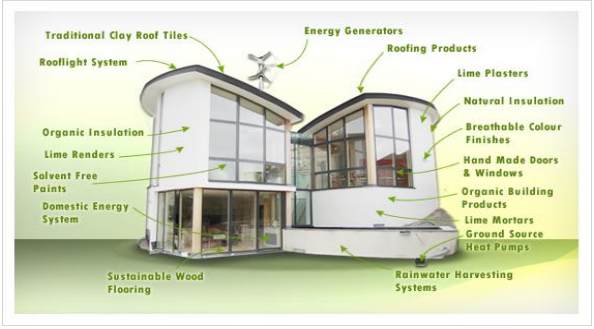
DYNAMIC AND DIFFUSED LIGHT

CARBON NEUTRAL DEVELOPMENT

Carbon neutrality, or having a net zero carbon footprint, refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the diference. It is used in the context of carbon dioxide

releasing processes associated with transportation, energy production, and industrial processes such as production of carbon neutral fuel.



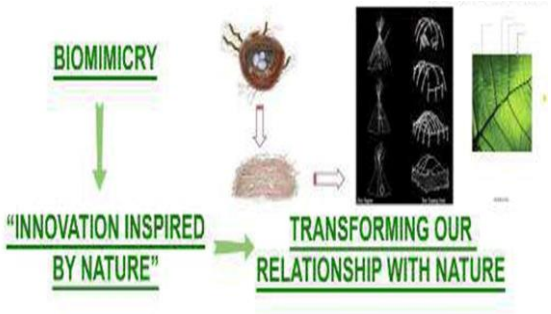


ECO HABITAT –COMMUNITY FOR RETIRED PERSON

Buildings for Retired person living must be of a particular type. The sustainable methods in those buildings are special in some respects. To meet the theory of sustainable design, it is necessary to evaluate the suitability of sustainable designs of buildings for Retired person living. This paper has researched literature of Retired person living to discover the differences from normal architectural designs. Afterwards, this paper presented three case studies on well-designed senior housing, including a nursing home, a complex nursing community and a senior apartment. After those studies, this paper recommends some effective sustainable designs in Retired person housing, including: Building Shape Coefficient, Energy-efficient HVAC system, Space optimization for efficient operation, Healing Garden Rain Garden, Three-dimensional green, Rainwater collection system, and solar arrays.

BIOMIMICRY

BIOMIMICRY IS DEFINED IN THE BOOK AS A "NEW SCIENCETHAT STUDIES NATURE'S MODELS AND THEN IMITATES ORTAKES INSPIRATION FROM THESE DESIGNS AND PROCESSESTO SOLVE HUMAN PROBLEMS".

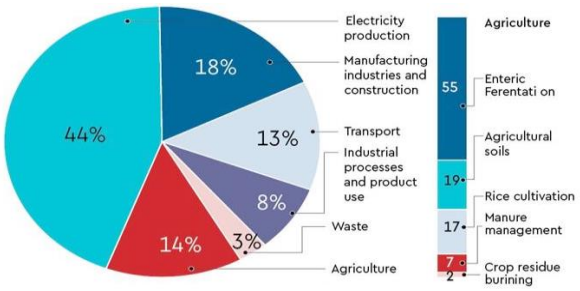


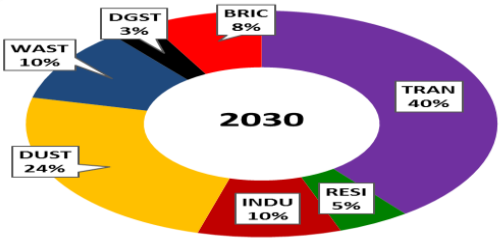
ADVANTAGES

TO CREATE NEW WAY OFLIVING
TO SAVE ENERGY AND CUTMATERIAL
TO ELIMINATE WASTE

Source : drishtiias.com

INDIA





BENGALORE CITY

ECO HABITAT

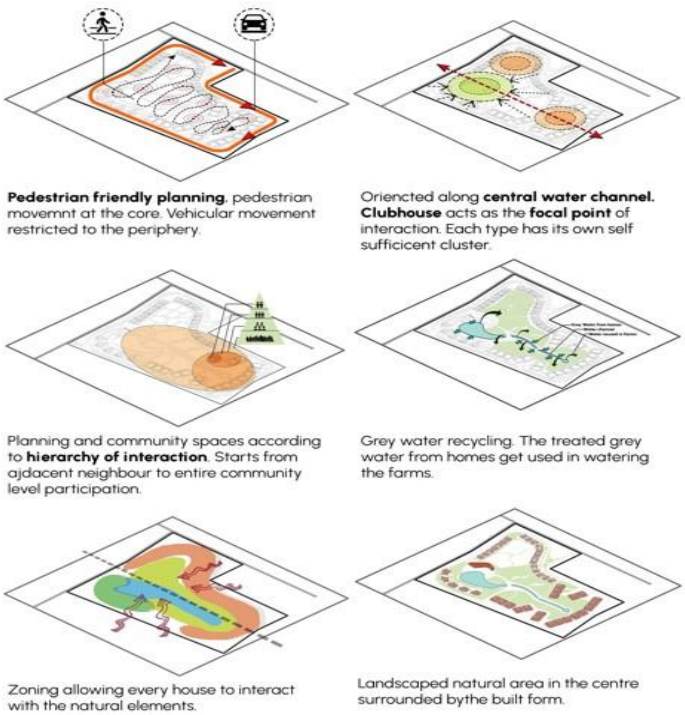
ABOUT ECO HOUSINGAN ECO-HABITA (OR ECO-HOME) IS AN ENVIRONMENTALLY LOW-IMPACTHOMEDESIGNED AND BUILT USING MATERIALS AND TECHNOLOGY THAT REDUC-ES ITS CARBON FOOTPRINT AND LOWERS ITS ENERGY NEEDS. ECOHOMES ARE MEASURED IN MULTIPLE WAYS MEETING SUSTAINABILITYNEEDS SUCH AS WATER CONVERSATION, REDUCING WASTES THROUGHREUSING AND RECYCLING MATERIALS, CONTROLLING POLLUTION TOOSTOP GLOBAL WARMING, ENERGY GENERATION AND CONSERVATIONS,AND DECREASING Co2 EMISSIONS

CARBON FOOTPRINT

A CARBON FOOTPRINT IS HISTORICALLY DEFINED AS THE TOTAL SET OF GREENHOUSE GAS EMISSIONS CAUSED BY AN INDIVIDUA, EVENT, ORGANISATION, OR PRODUCT, EXPRESSED AS CARBON DIOXIDE EQUIVALENT

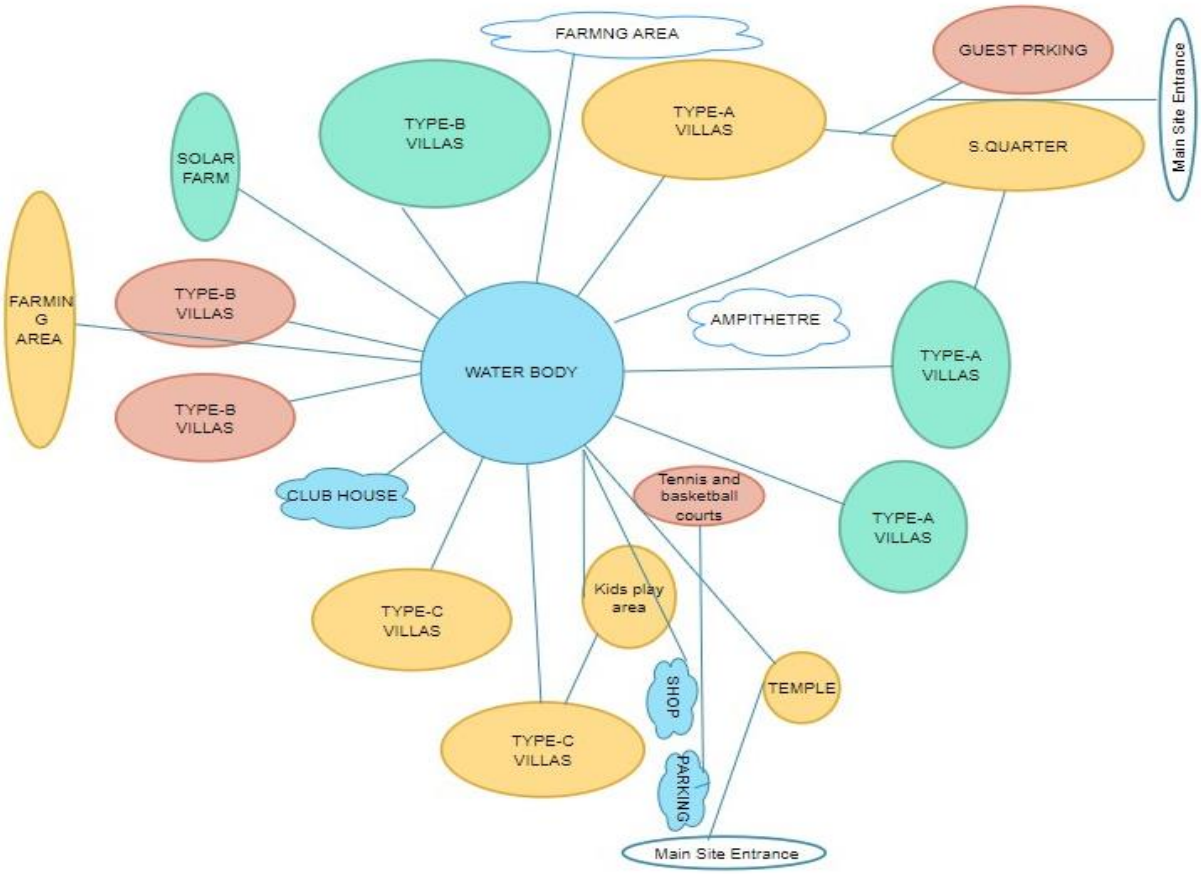
REDUCING CARBON FOOTPRINTCARBON NEUTRALITY, OR HAVING A NET ZERO CARBON FOOT-PRINT, REFERS TO ACHIEVING NET ZERO CARBON EMISSIONS BYBALANCING A MEASURED AMOUNT OF CARBON RELEASED WITHAN EQUIVALENT AMOUNT SEQUESTERED OR OFFSET, OR BUYINGSENOUGH CARBON CREDITS TO MAKE UP THE DIFFERENCE. IT ISUSED IN THE CONTEXT OF CARBON DIOxIDE RELEASING PR0CESSES ASSOCIATED WITH TRANSPORTATION, ENERGY PRODUCTION, AND INDUSTRIAL PROCESSES SUCH AS PRODUCTION OFCARBON NEUTRAL FUEL

/Design development

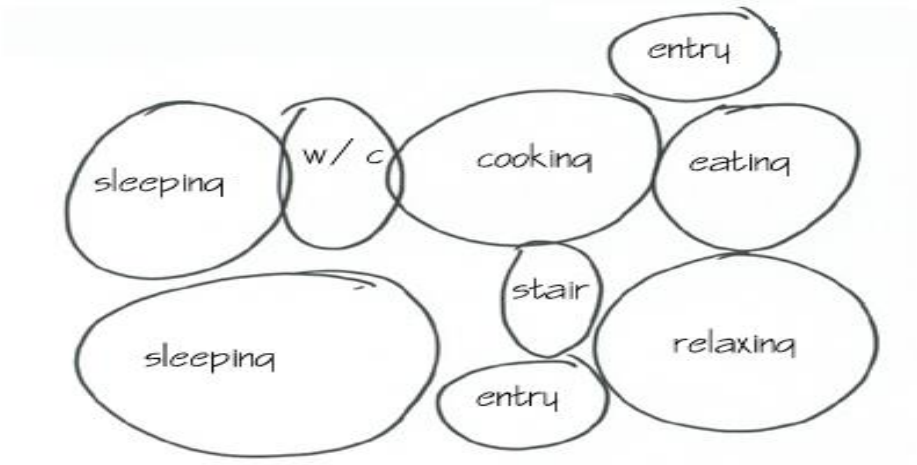


CHAPTER 5 – DESIGN IDEATION

BUBBLE DIAGRAM

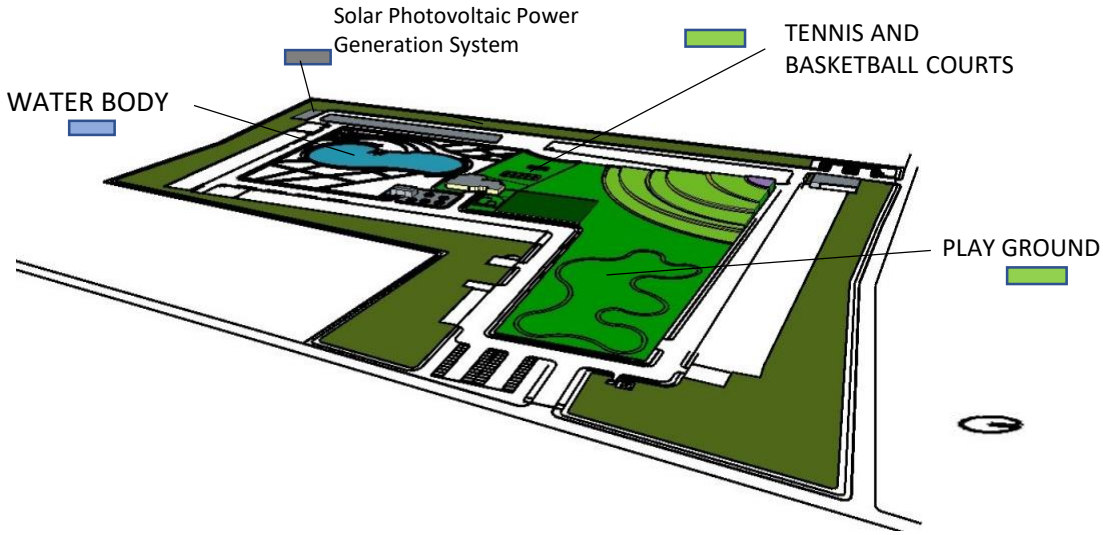


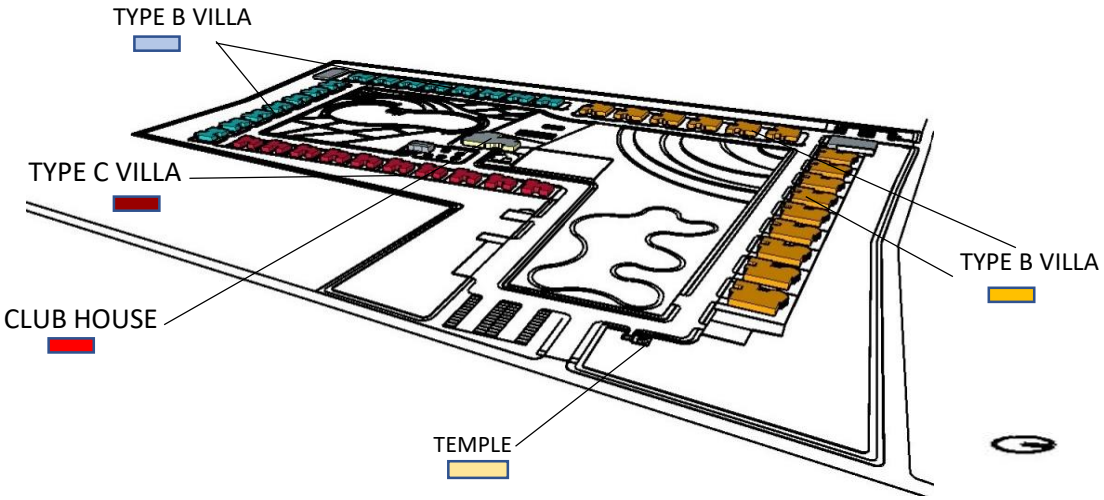
SITE

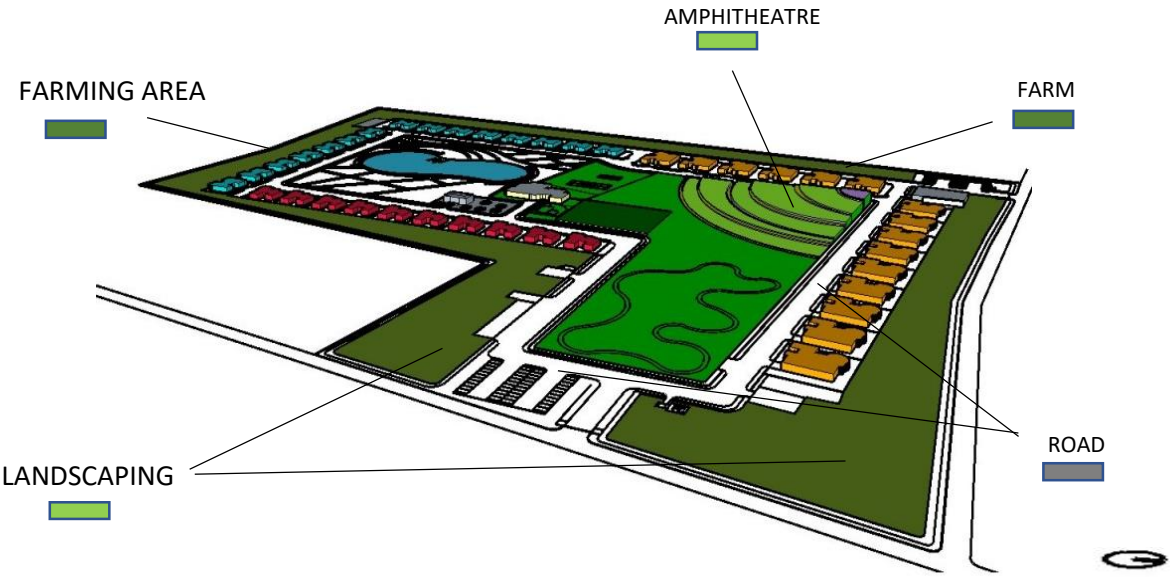


VILLA

VERTICAL STACKING







CHAPTER 7 – LANDSCAPE

SACRED FIG TREE / BODHI / PEEPAL

BOTANICAL NAME: FICUS RELIGIOSA
KARNATAKA NAME: ARALI MARA
HEIGHT:UPTO 30M
SEASON: RAINY SEASON
USAGE:THE LEAF JUICE OF THE PEEPAL TREE MAY BE HELPFUL FOR COUGH, ASTHMA, DIARRHOEA, EAR PAIN, TOOTHACHE, HAEMATURIA (BLOOD IN URINE), MIGRAINE, SCABIES, EYE TROUBLES, AND GASTRIC PROBLEMS. THE STEM BARK OF THE PEEPAL TREE MIGHT HELP WITH PARALYSIS, GONORRHOEA, BONE FRACTURES, DIARRHOEA, AND DIABETES.

Jujube Tree / Ber
Botanical Name: Ziziphus mauritiana
KARNATAKA Name: BAARI HANNU
HEIGHT:UPT 15M
SEASON: DEC-MAR
USAGE
Jujube contains a high amount of potassium which helps in vasodilation and maintains blood pressure optimally. Jujube fruits have betulinic acid that has anti-inflammatory and antibacterial properties.
This date contains a bromelain enzyme that reduces mucus
build-up and clears respiratory pathways.

Mango Tree / Aam
Botanical Name: Mangifera indica
KARNATAKA Name: MAVINA MARA
HEIGHT:UPT 30M
SEASON:MAY-SEPT
USAGE
Mango tree
leaves also contain antibacterial qualities that aid in treating skin burns and bacterial skin illnesses, including staph infections. Mango tree leaves contain anthocyanin, which instantly soothes burns.

BAMBOO TREE / BAANS
BOTANICAL NAME: BAMBUSOIDEAE
KARNATAKA NAME: BIDIRU
HEIGHT:UPTO 16M
SEASON: MAR-JUN
USAGE
BAMBOO HAS MANY USES, MAINLY IN CONSTRUCTION (FLOORING, ROOFING DESIGNING, AND SCAFFOLDING), FURNITURE, FOOD, BIOFUEL, FABRICS, CLOTH, PAPER, PULP, CHARCOAL,
ORNAMENTAL GARDEN PLANTING, AND ENVIRONMENTAL CHARACTERISTICS,
SUCH AS A LARGE CARBON SINK AND GOOD PHYTOREMEDIATION OPTION,
IMPROVING SOIL STRUCTURE AND SOIL EROSION.

CHAPTER 7 – LANDSCAPE

MAST TREE / FALSE ASHOKA
BOTANICAL NAME: POLYALTHIA LONGIFOLIA
KARNATAKA NAME: KASHTA DARU
HEIGHT:UPT 15M
SEASON: FEB-APR
USAGE
ASHOKA TREE MAY ACT AGAINST CANCER. IT MAY BE USED FOR
BACTERIAL INFECTIONS, ARTHRITIS, ULCERS AND DEPRESSION.
ASHOKA TREE MAY PROTECT THE HEART AND HELP TO REDUCE
BLOOD SUGAR LEVELS. ADDITIONALLY, THE ASHOKA TREE MAY
HELP TO RELIEVE PAIN.

COCONUT PALM TREE / NARIYAL
BOTANICAL NAME: COCOS NUCIFERA
KARNATAKA NAME: THENGINA MARA
HEIGHT:UPTO16M
SEASON: APR-SEPT
USAGE:TRUNKS ARE USED IN CONSTRUCTION AND FURNITURE
MAKING, AND LEAVES ARE USED IN A VARIETY OF WAYS IN DOMESTIC
ECONOMIES. THE AFRICAN OIL PALM IS IMPORTANT CHIEFLY FOR THE
PALM OIL OBTAINED FROM THE FRUIT COAT AND FOR KERNEL OIL FROM THE SEED.

NEEM TREE
BOTANICAL NAME: AZADIRACHTA INDICA
KARNATAKA NAME: BEVINA MARA
HEIGHT:UPTO30M
SEASON: JAN-MAY
USAGE:THE TREATMENT OF INFLAMMATION, INFECTIONS, FEVER, SKIN DISEASES AND DENTAL DISORDERS.
THE MEDICINAL UTILITIES HAVE BEEN DESCRIBED ESPECIALLY FOR NEEM LEAF.

ROYAL POINCIANA TREE / GULMOHAR
BOTANICAL NAME: DELONIX REGIA
KARNATAKA NAME: KEMPU TORAI
HEIGHT:UPTO12M
SEASON: APR-MAY
USAGE:IT CAN BE USED AS ANTIBACTERIAL, ANTI-INFLAMMATORY,
ANTIFUNGAL, ANTIMICROBIAL, ANTIOXIDANT, ANTIMALARIAL,
GASTRO-PROTECTIVE, CARDIO-PROTECTIVE ALONG WITH WOUND HEALING PROPERTIES

FRANGIPANI TREE / CHAMPA
BOTANICAL NAME: PLUMERIA
KARNATAKA NAME: DEVA KANAGILU
HEIGHT:UPT 8M
SEASON: MAR-AUG
USAGE
IT'S THE FLOWERS AND LEAVES OF THIS TREE THAT ARE
THE MOST USEFUL PART WHEN IT COMES TO HEALTH BENEFITS.
KANAK CHAMPA FINDS USE IN AYURVEDA, WHERE ITS FLOWERS
AND LEAVES ARE USED IN TREATING HEADACHES, ULCERS, WOUNDS,
COUGHS, COLDS, BLEEDING DISORDERS, ETC.

SITE PLAN

Site Coordinates : 13° 16'11.18" , 77°37'4.54"

Site Location : **Bangalore , Karnataka (India)**

Site Area : **37.46 Acre**

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

SITE PLAN

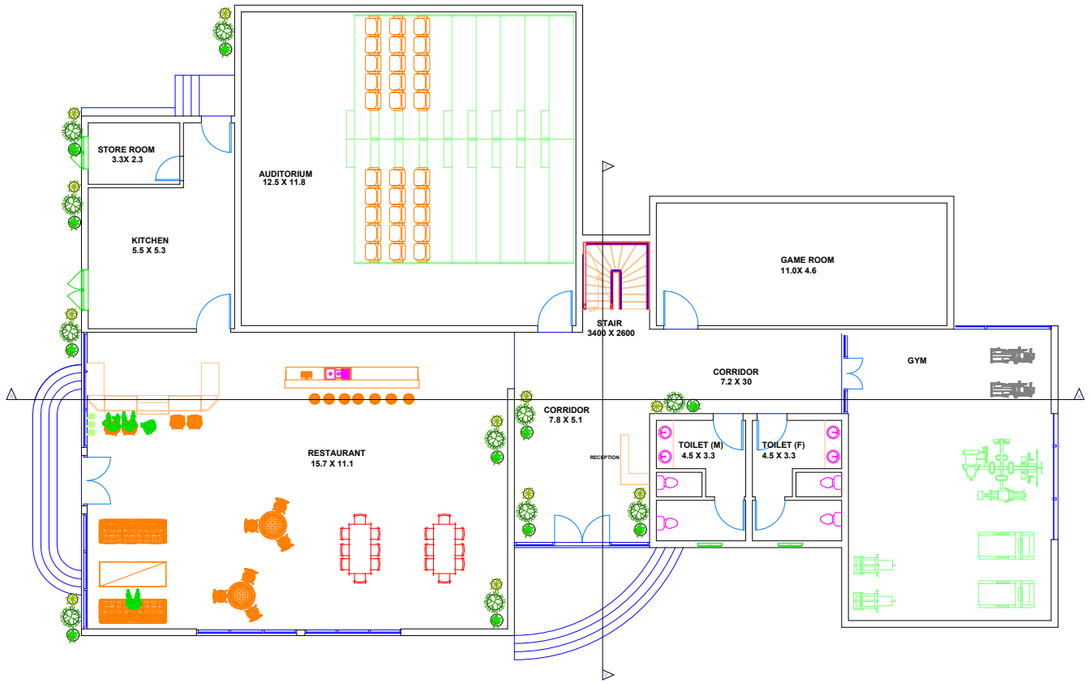
SCALE : 1:500

NORTH

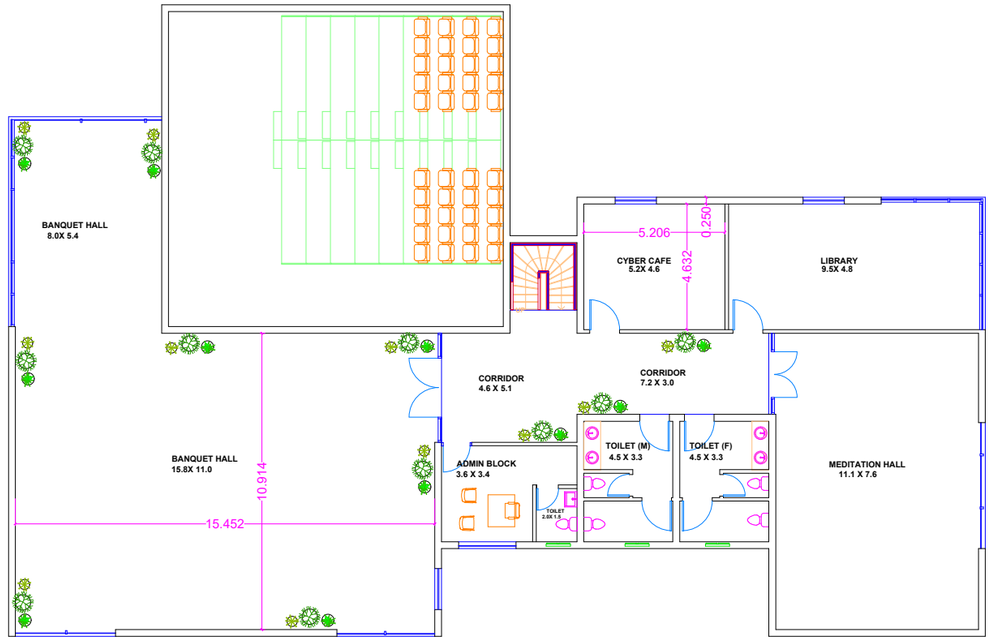
ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

01

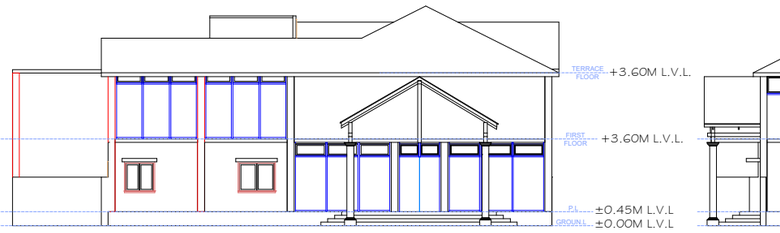
SHEET NO.



GROUND FLOOR PLAN



FIRST FLOOR PLAN



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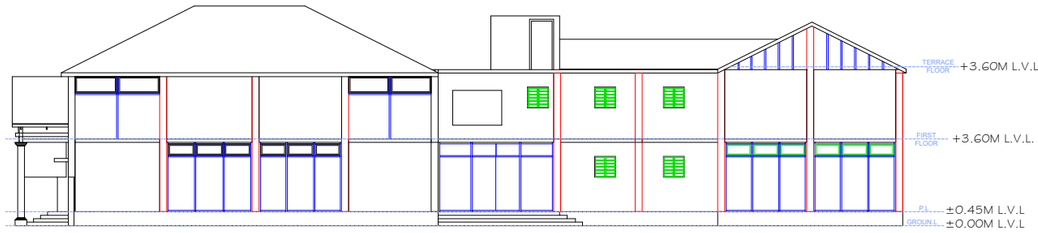
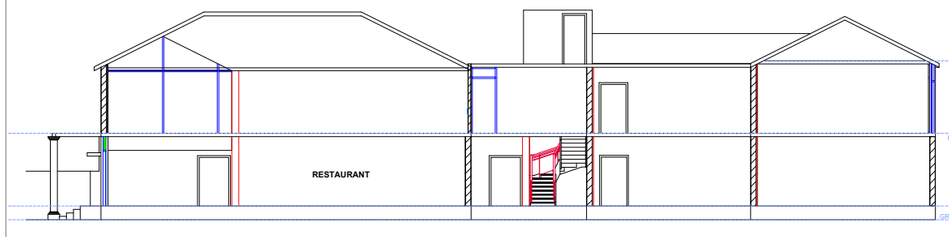
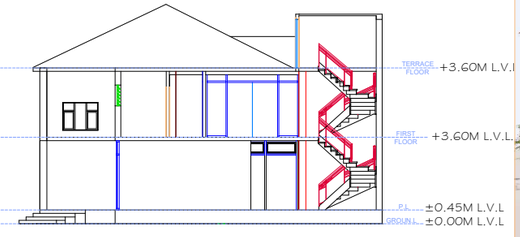


REAR ELEVATION

VIEW 2



SECTION-XX



SECTION-YY

VIEW 1

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

DETAILS OF CLUB HOUSE

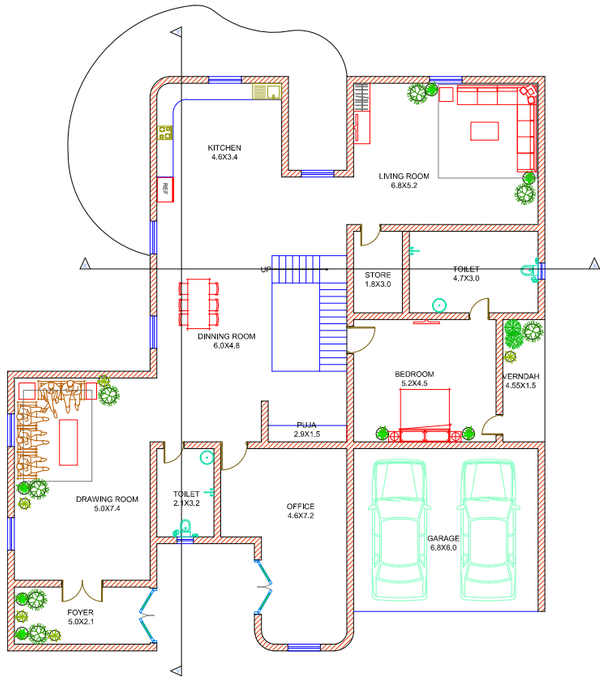
SCALE : 1:100

NORTH

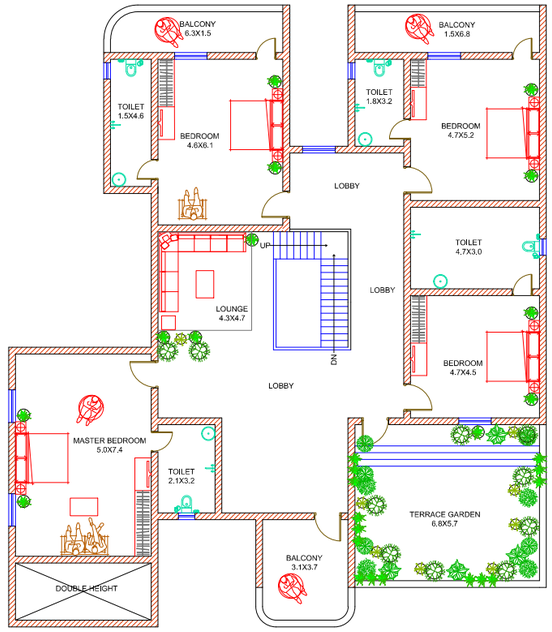
ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

02

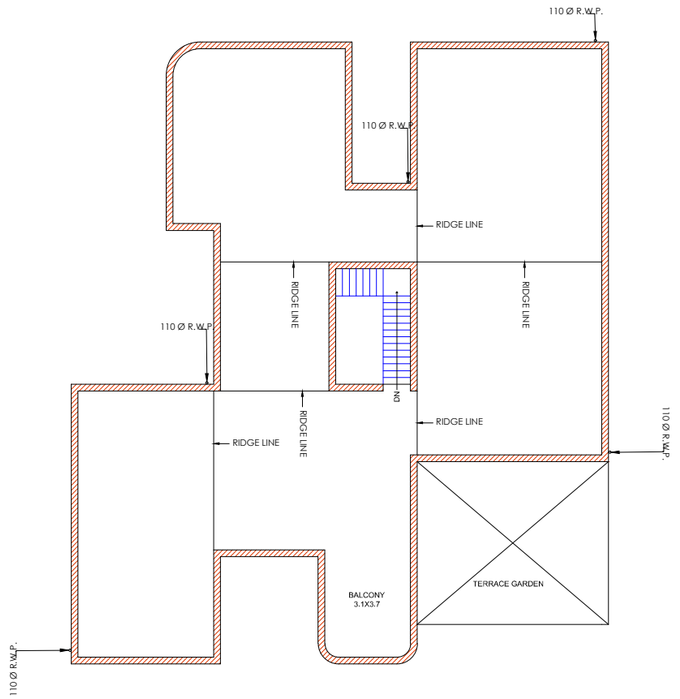
SHEET NO.



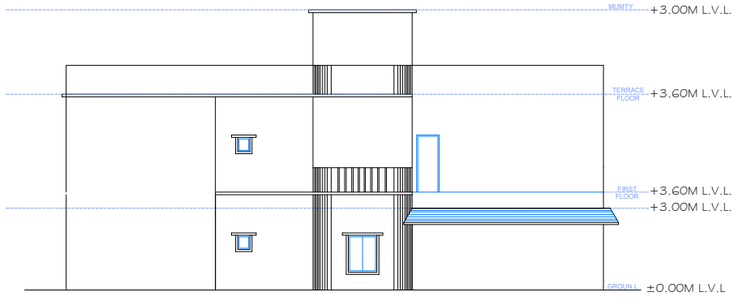
GROUND FLOOR PLAN



1ST FLOOR PLAN



TERRACE FLOOR PLAN



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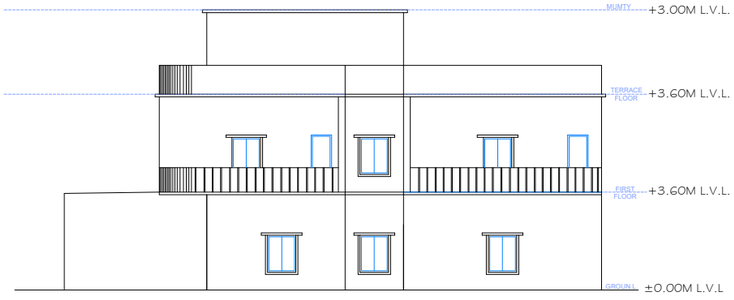

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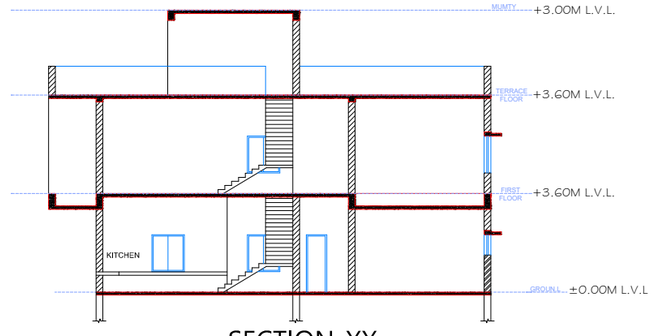
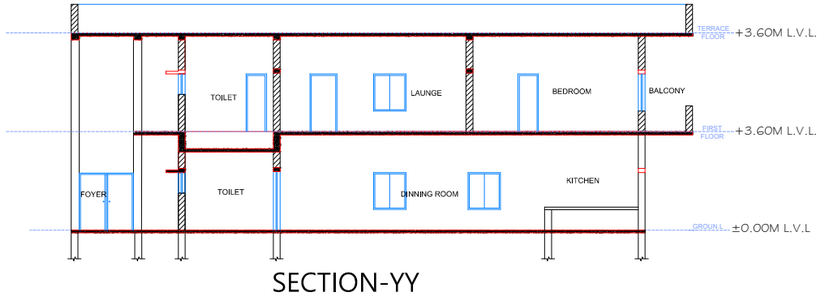


SECTION-XX



SECTION-YY

VIEW 1

VIEW 2

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

DETAILS OF TYPE "A" VILLA

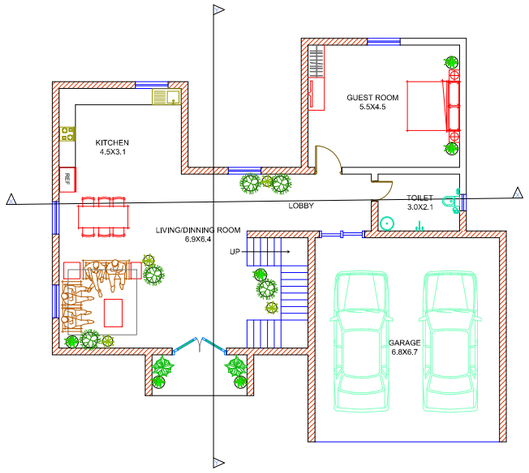
SCALE : 1:100

NORTH

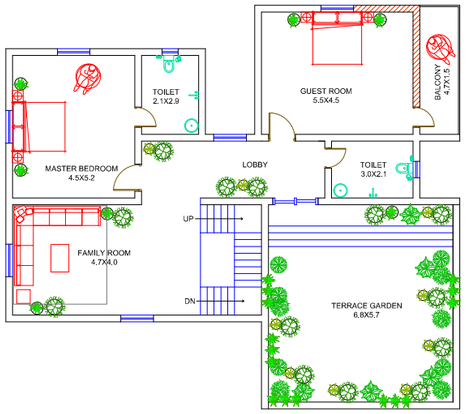
ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

03

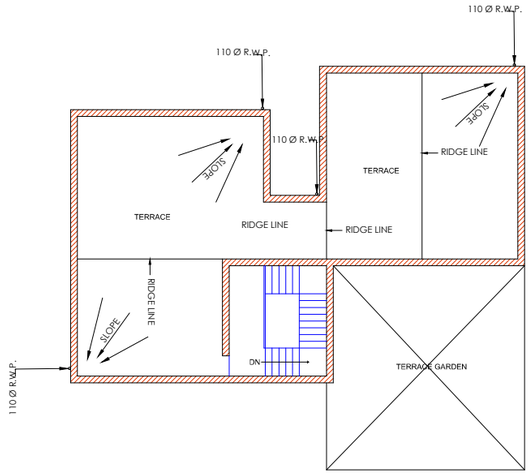
SHEET NO.



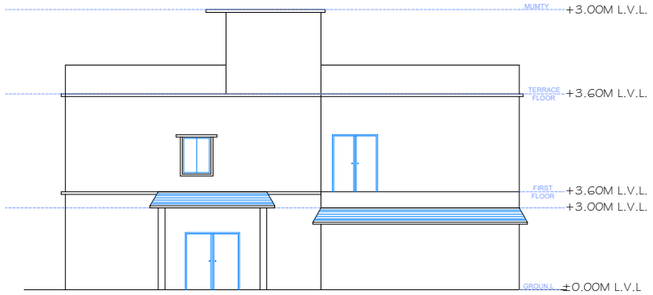
GROUND FLOOR PLAN



1ST FLOOR PLAN



TERRACE FLOOR PLAN



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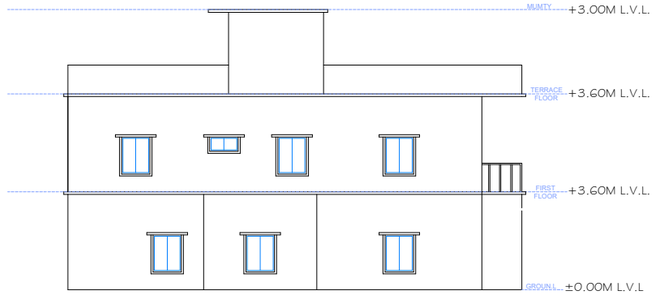
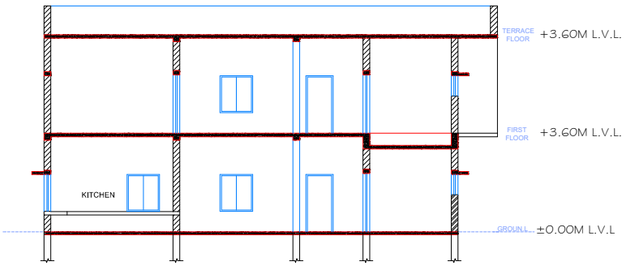
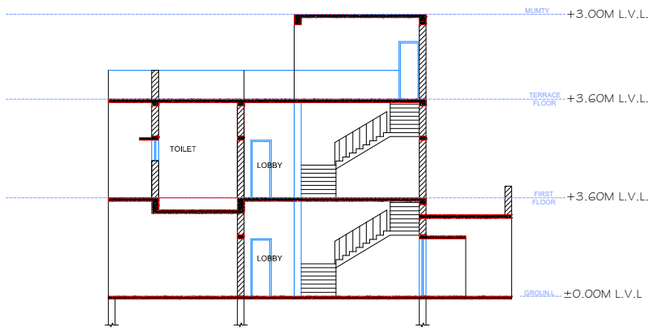


REAR ELEVATION



SECTION-XX



SECTION-YY

VIEW 1

VIEW 2

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

DETAILS OF TYPE "B" VILLA

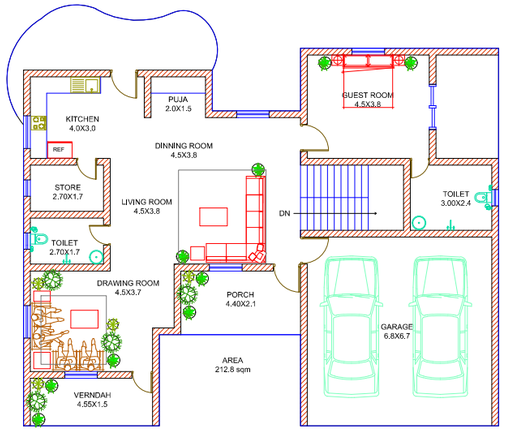
SCALE : 1:100

NORTH

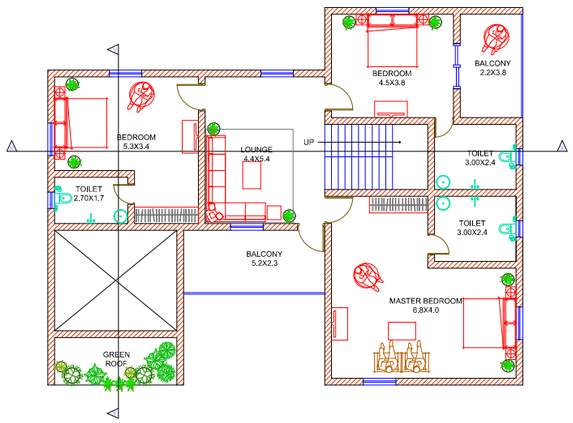
ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

04

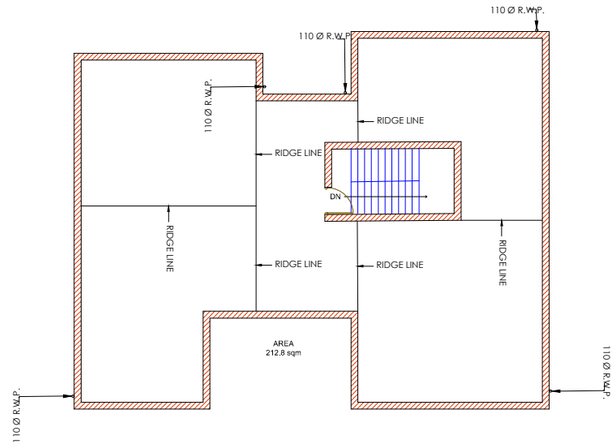
SHEET NO.



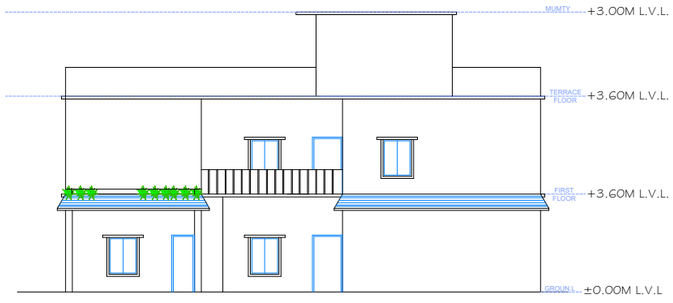
GROUND FLOOR PLAN



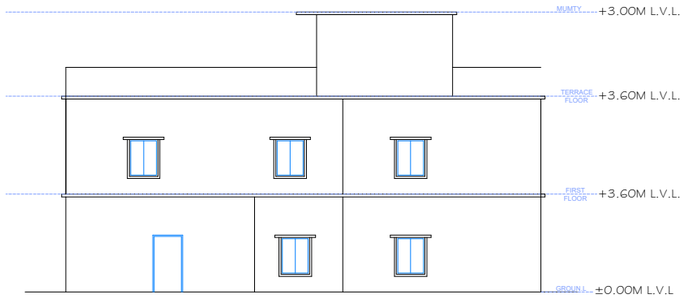
1ST FLOOR PLAN



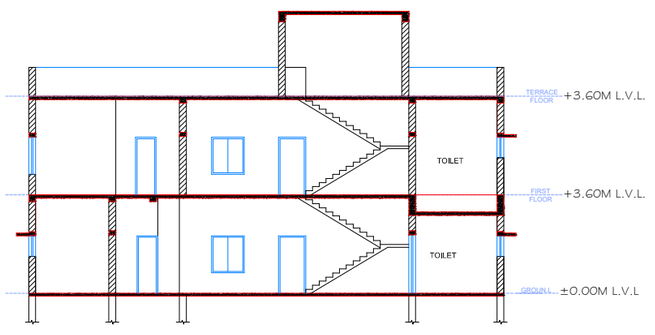
TERRACE FLOOR PLAN



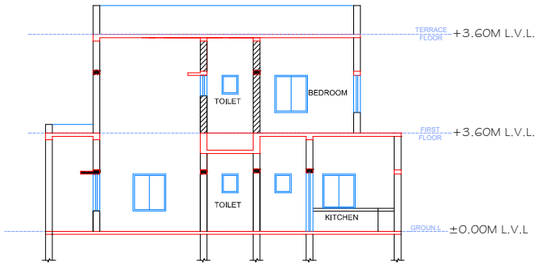
FRONT ELEVATION



REAR ELEVATION



SECTION -XX



SECTION-YY

VIEW 1

VIEW 2

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

DETAILS OF TYPE "C" VILLA

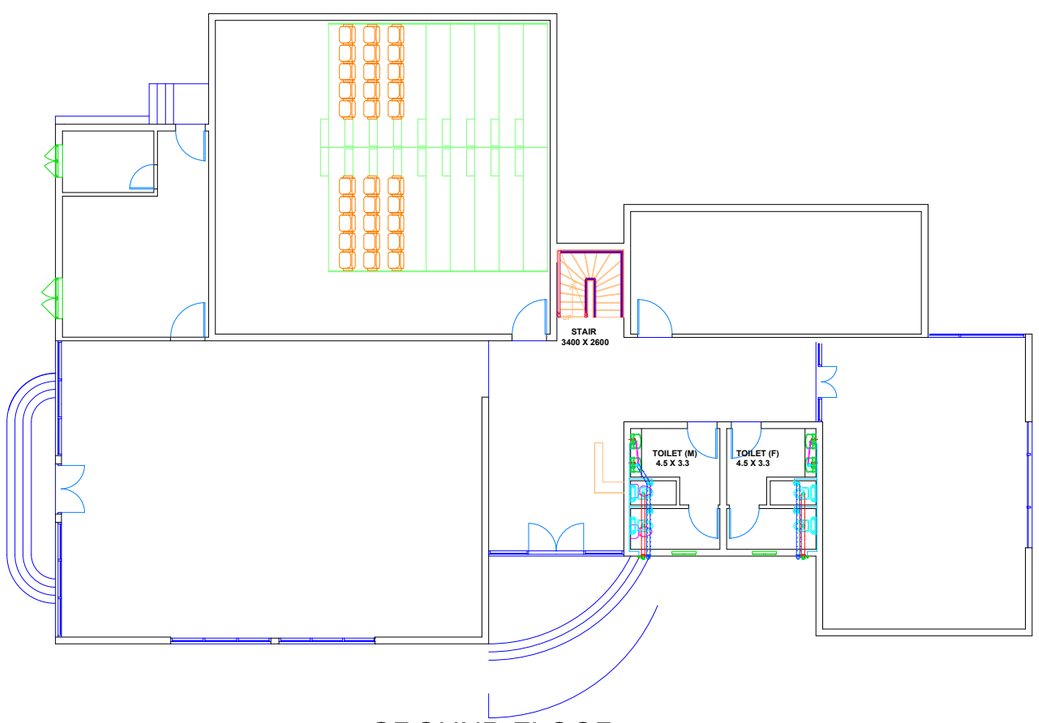
SCALE : 1:100

NORTH

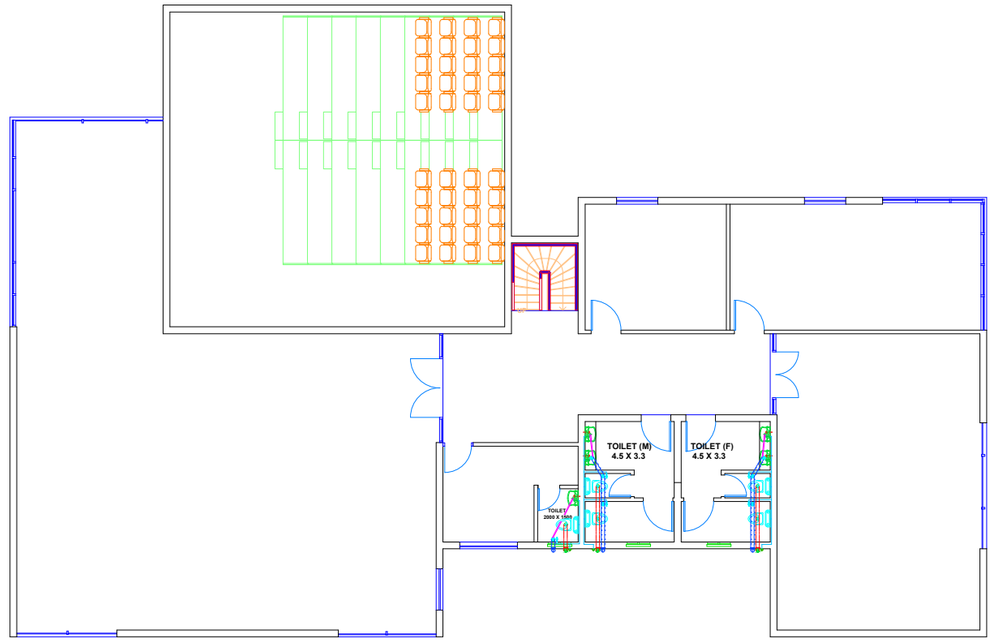
ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

05

SHEET NO.

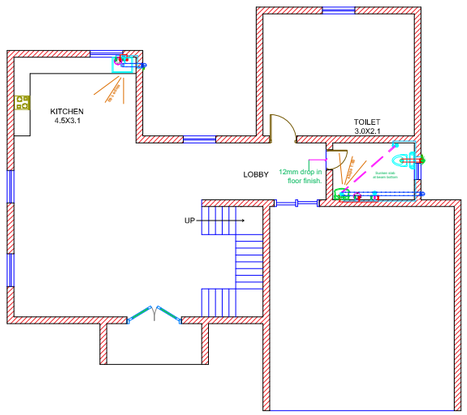


GROUND FLOOR

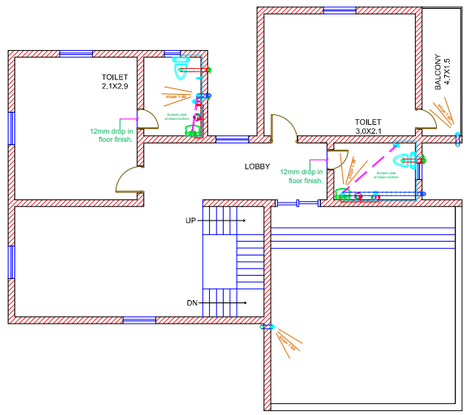


FIRST FLOOR

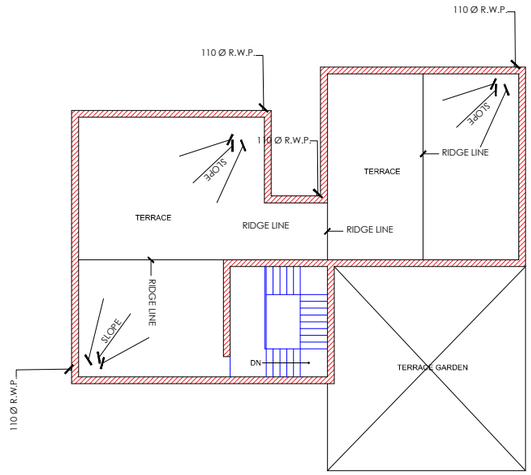
TYPE C



GROUND FLOOR



FIRST FLOOR



TERRACE FLOOR

LEGEND :-

S.N.	SYMBOLS	PARTICULARS
01.		110 Ø P.V.C SOIL AND VENT PIPE
02.		110 ØPVC. WASTE AND VENT PIPE
03.		FLOOR TRAP
04.		110Ø PVC. RAIN WATER PIPE
05.		G.I.WATER SUPPLY DOWNCOMER PIPE
06.		BIB COCK
07.		SHOWER
08.		I.W.C
09.		wash basin
10.		12mm g.i. cold water pipe
11.		12mm g.i. hot water pipe
12.		KITCHEN SINK
13.		110 Ø P.V.C SOIL AND VENT PIPE
14.		110 ØPVC. WASTE AND VENT PIPE
15.		E.W.C
16.		INSPECTION CHAMBER WITH SOIL SEWER.
17.		INSPECTION CHAMBER WITH WASTE SEWER.
18.		KITCHEN CATCH PIT
19.		Ablution tap
20.		Geyser

s.l	*fixture*	*height*
01.	Ablution tap	300
02.	Angle stop cock cistern	600
03.	Cistern bottom (i.w.c)	600
04.	Cistern bottom (e.w.c)	750
05.	Angle stop cock wash basin	450
06.	Geyser bottom	1800
07.	Concealed stop cock	1050
08.	Long nose bib cock	900
09.	Shower	2100
10.	Angle cock geyser	1500
11.	Wash basin top	850
12.	Sink top	850
13.	Bib cock sink	900
14.	disc wash top	450

SHCEDULE FOR INSPECTION CHAMBER

S.N.	DEPTH	SIZE
01.	375 TO 900	900X800
02.	901 TO 2400	1200X900
03.	2401 OR MORE	1400ØMAIN HOLE

SCHEDULE FOR SLOPE OF SEWER

S.N.	DIA OF PIPE	SLOPE
01.	100Ø	1 : 60
02.	150Ø	1 : 100
03.	225Ø	1 : 150

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

PLUMBING DETAIL OF CLUB HOUSE & TYPE C VILLA

SCALE : 1:100

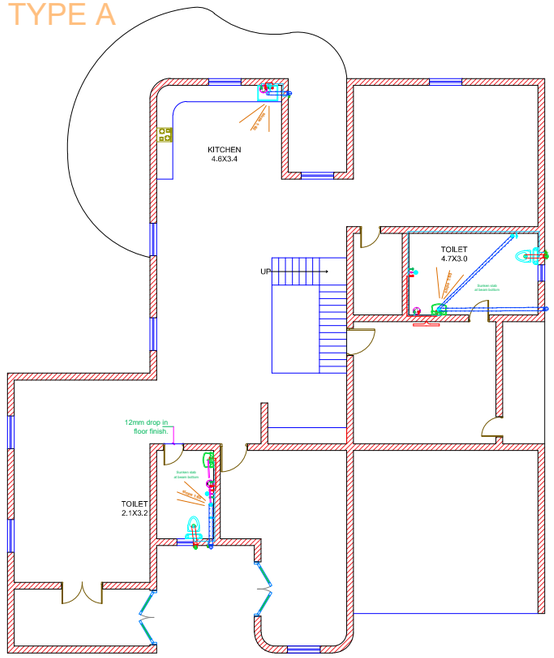
NORTH

ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

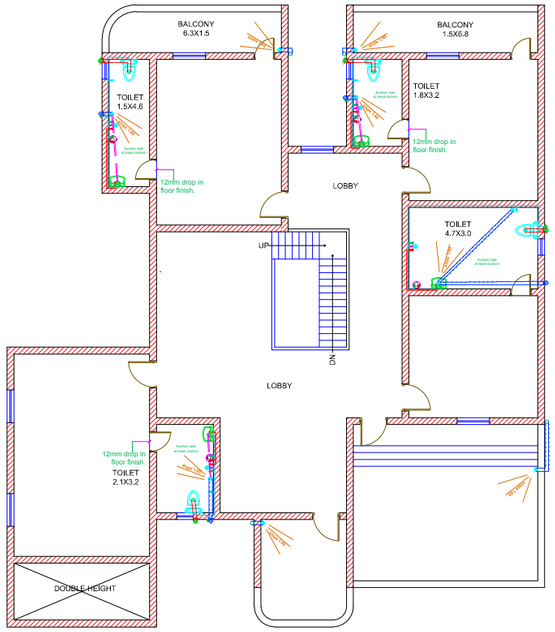
06

SHEET NO.

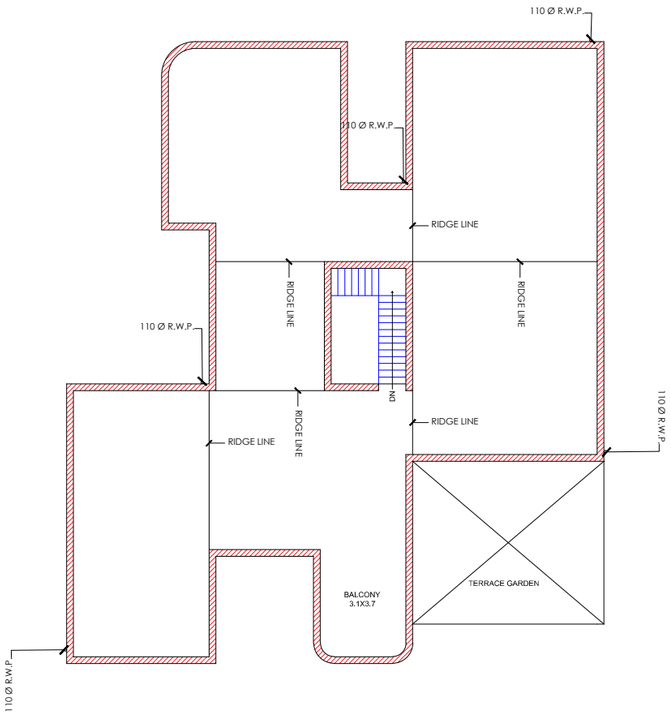
TYPE A



GROUND FLOOR

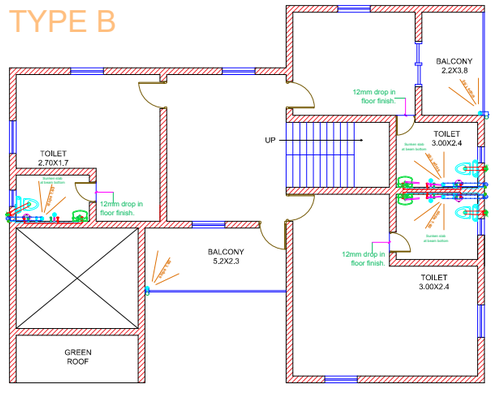


FIRST FLOOR

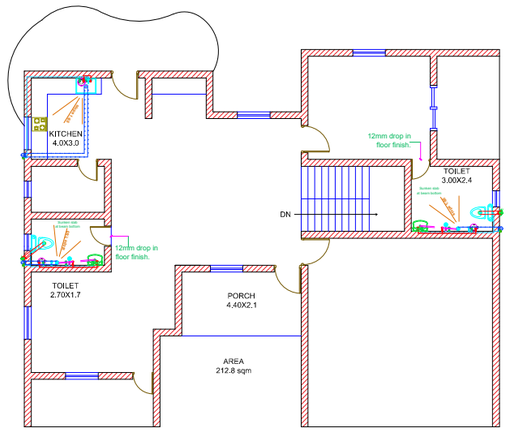


TERRACE FLOOR

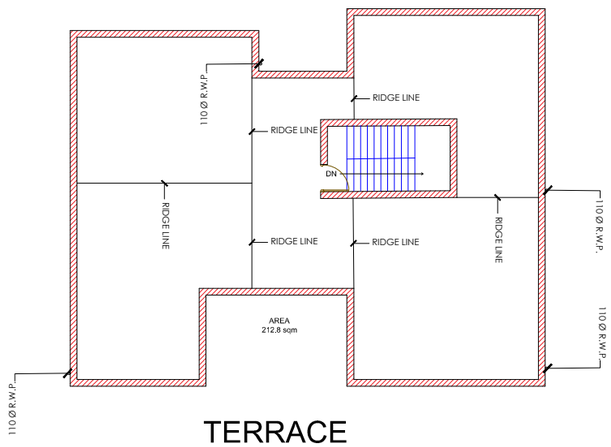
TYPE B



FIRST FLOOR



GROUND FLOOR



TERRACE FLOOR

LEGEND :-

S.N.	SYMBOLS	PARTICULARS
01.		110 Ø P.V.C SOIL AND VENT PIPE
02.		110 ØPVC. WASTE AND VENT PIPE
03.		FLOOR TRAP
04.		110Ø PVC. RAIN WATER PIPE
05.		G.I WATER SUPPLY DOWNCOMER PIPE
06.		BIB COCK
07.		SHOWER
08.		I.W.C
09.		wash basin
10.		12mm g.i. cold water pipe
11.		12mm g.i. hot water pipe
12.		KITCHEN SINK
13.		110 Ø P.V.C SOIL AND VENT PIPE
14.		110 ØPVC. WASTE AND VENT PIPE
15.		E.W.C
16.		INSPECTION CHAMBER WITH SOIL SEWER.
17.		INSPECTION CHAMBER WITH WASTE SEWER.
18.		KITCHEN CATCH PIT
19.		Ablution tap
20.		Geyser

s.l	*fixture*	*height*
01.	Ablution tap	300
02.	Angle stop cock cistern	600
03.	Cistern bottom (i.w.c)	600
04.	Cistern bottom (e.w.c)	750
05.	Angle stop cock wash basin	450
06.	Geyser bottom	1800
07.	Concealed stop cock	1050
08.	Long nose bib cock	900
09.	Shower	2100
10.	Angle cock geyser	1500
11.	Wash basin top	850
12.	Sink top	850
13.	Bib cock sink	900
14.	disc wash top	450

SHCEDULE FOR INSPECTION CHAMBER

S.N.	DEPTH	SIZE
01.	375 TO 900	900X800
02.	901 TO 2400	1200X900
03.	2401 OR MORE	1400ØMAIN HOLE

SCHEDULE FOR SLOPE OF SEWER

S.N.	DIA OF PIPE	SLOPE
01.	100Ø	1 : 60
02.	150Ø	1 : 100
03.	225Ø	1 : 150

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

PLUMBING DETAIL OF TYPE A VILLA & TYPE B VILLA

SCALE : 1:100

NORTH

ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

07

SHEET NO.

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

PLUMBING DETAIL OF SITE

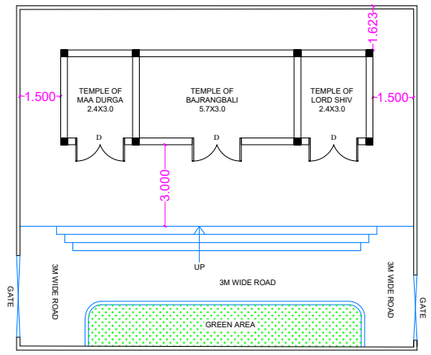
SCALE : 1:500

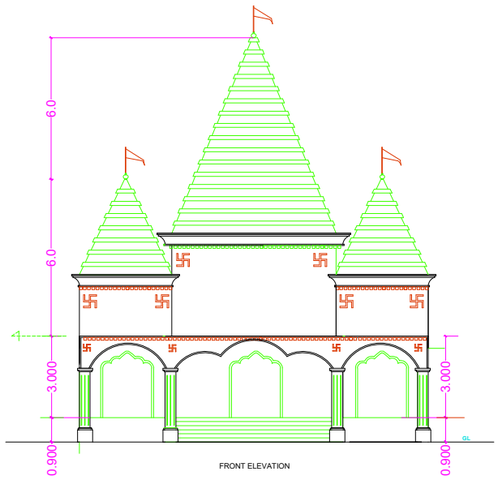
NORTH

ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

08

SHEET NO.





FRONT ELEVATION

DESIGN PROPOSAL

THESIS:

THE COMMUNITY OF ECO HABITAT AT BANGLORE

SHEET TITLE:

DETAIL OF TEMPLE

SCALE : 1:100

NORTH

ABHISHEK BARDHAN
ROLL NO.- 1180101003
10TH SEM, 5TH YEAR (B.ARCH)
B.B.D.U LUCKNOW

09

SHEET NO.