THESIS REPORT ON

“ART MUSEUM”
(R.K. LAXMAN KI DUNIYA)
PUNE

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF:

BACHELOR OF ARCHITECTURE BY

(ANUPAMA VISHWAKARMA)
(1150101018)

THESIS GUIDE
(ANSHU RASTOGI)

SESSION
2019-2020

TO THE
SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY

SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).

CERTIFICATE

I hereby recommend that the thesis entitled **"ART MUSEUM (R K Laxman ki duniya)"** under the supervision, is the bonafide work of the students and can be accepted as partial fulfillment of the requirement for the degree of Bachelor's degree in Architecture, School of Architecture and Planning,
BBDU, Lucknow.

Prof. Mohit Kumar Agarwal
Dean of Department

Prof. Sangeeta Sharma
Head of Department

Recommendation Accepted
Not Accepted

External Examiner

INDEX

INTRODUCTION

A Museum is an institution that cares for (conserves) a collection of artificats and other objects of artistic, cultural, historical or scientific importance. Public Museums make these items available for public viewing through exhibits that may be permanent or temporary .

Museums have varying aims, ranging from serving researchers and specialists to serving the general public.

There are many types of museums , including art museums , natural history museums, science museums, war museums, and children's museums.

An Art Museum or Art Gallery is a building or space for the display of art , usually from the museum's own collection.

In India there are many Art Galleries which are constructed to give the tribute to the famous personalities like Gandhi Ashram Gujarat, Sabarmati Ashram , Amadavad Ni Gufa ,National Hallery of Modern Arts New Delhi etc.

(R K Laxman Ki Duniya) An Art Gallery is also the tribute given to the R K Laxman Sir. He was an Indian Cartoonist, illustrator , and humourist.

In this Art Gallery there will his work from his childhood to his death.

There will be an educational system provided to the children to learn about the graphical design n etc.

AIM

The aim of this project is to promote the wider knowledge , appreciation and enjoyment of the art .

Art galleries exhibits works by artists known by the general public , drive the career of young contemporary artists or recover the name of those artist whom, despite the quality of their work, for historical reasons have been relegated to the background sometimes, the work of recuperating an artist or an artistic work of museum, therefore in several occasions the function of the gallery is not exclusively commercial.

SITE ANALYSIS

Pune is the second largest city in the Indian state of Maharashtra , after Mumbai . It is the ninth most populous city in the country with an estimated population of 6.4 million. Situated 560 m above sea level on the Deccan Plateau on the right bank of the Mutha River. Central Pune is at the confluence of the Mula and Mutha Rivers suitable of a tourist centre.

SITE AREA - 5.1 Acre

SITE SELECTION- Sangamwadi Pune Maharashtra.

COORDINATES- 18 32’ 22” N 73 51’ 48” E

18M wide sangamwadi road with 6 M wide internal roads.

ACCESSIBILITY

1. The site has a good accessibility in terms of public transportation. Railways Station is 2.3 km far from the site.
2. Pune Airport is 4 km far from the site.
3. Mumbai Pune Highway (NH4) is 500 M far from the site
4. Local Bus Depot is 100M far from the site.

SERVICES AVAILABLE

1. Sewage Lines have been already laid.
2. Electricity Supply comes from Maharashtra Electricity Board.
3. Underground Water Supply is present.
4. Public Transport is easily available.

TOPOGRAPHY

Natural Slopes of the site is towards the Mula River i.e. towards North East.

SWOT ANALYSIS

STRENGTH

1. Site is located at the central district of the city.
2. Site has a good accessibility in terms of public transportation.
3. Site is surrounded by large no. of institute i.e. Pune college of Engineering , Bombay Engineering group etc.
4. Presence of Sangam of two rivers.

WEAKNESS

1. Presence of dense vegetation on site.
2. No beautification of existing riverfront.
3. Site appears to be isolated due to lack of development in the nearby areas.
4. During monsoon there is a continuous threat of floods because of the river.

OPPORTUNITIES

1. Capable of becoming a major tourist attraction.
2. Development of riverfront can attract visitors more.

FLEXIBITY

The modern tendency is to create large unbroken spaces which can be divided up by movable partitions or lightweight structures to be grouped as required.

Layout of Exhibition---Provides Flexibility

STANDARDS

Museum and Gallery

A gallery should not be:-

1. Well defined space.
2. Sound effects coming at irregular intervals from the back.
3. Standing areas must be provided for maximum attendance.
4. Exhibition spaces should be nearer because of security.
5. The Path should be unobstructed and well defined.
6. Absolutely controlled circulation .
7. Most exhibition galleries and stands are rectangular for better flow of people from one end to another.

CLIAMTOLOGY

GEOGRAPHICAL LOCATION

1. Latitude- 18.54
2. Longitude- 73.86
3. Sea Level- 553M

SOIL CONDITIONS

1. Black Soil –clayey in nature.
2. Falls in Agro – climatic conditions thus, is fertile.
3. Low Bearing Capacity.

GROUND WATER

1. High Ground water level.
2. Less than 10 m below ground level.

CLIMATE

1. Summer Temperature – 30-38 degree Celsius
2. Winter Temperature- 18-12 degree Celsius
3. Rainfall varying From 650-700MM
4. Average Humidity is 75%
5. Average Precipitation is 2260MM

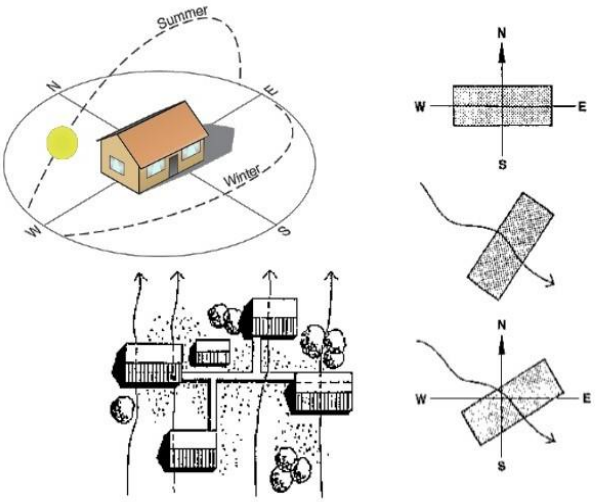
ORIENTATIONS

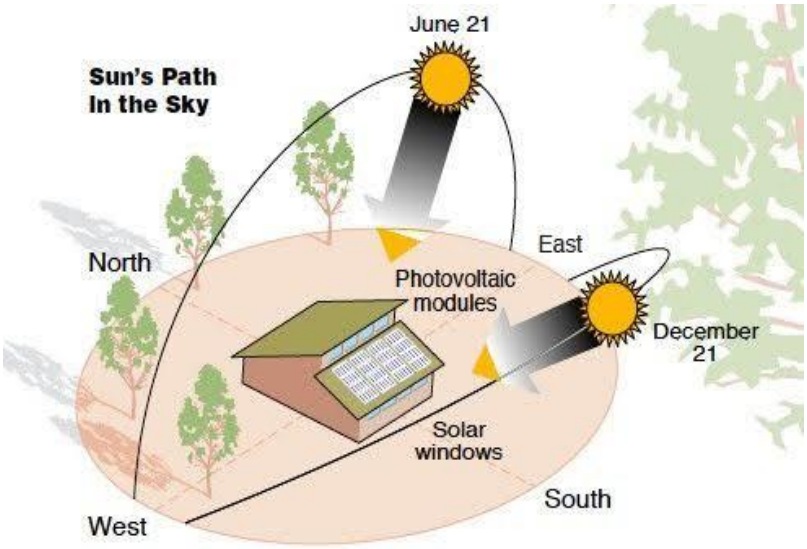
1. Wind directions is from NW-NE

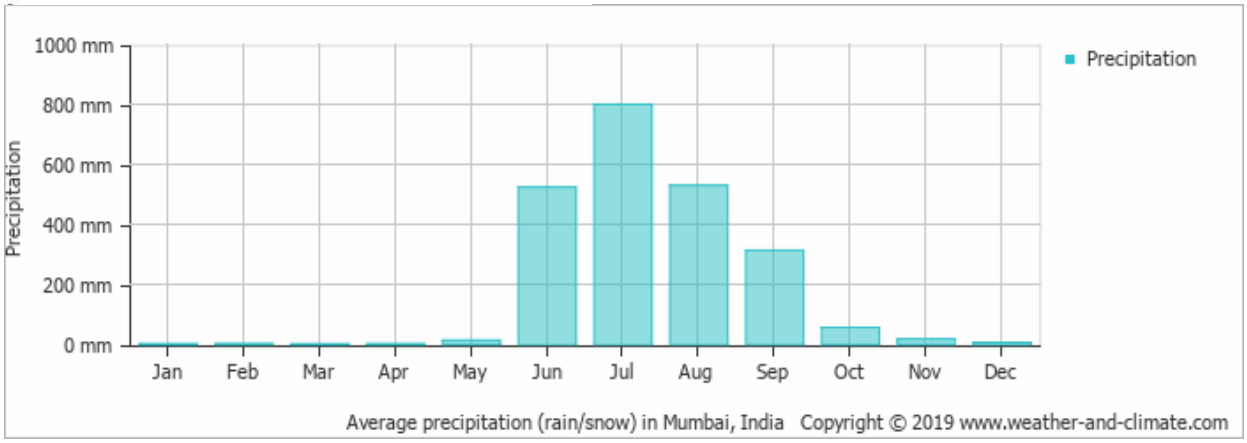
PICTURES

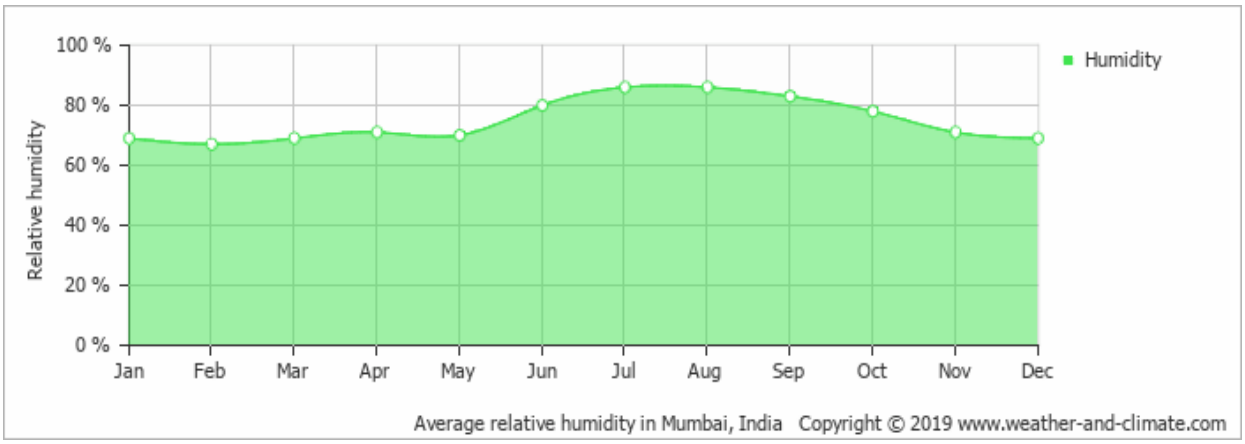
➔ **Sun Orientation**

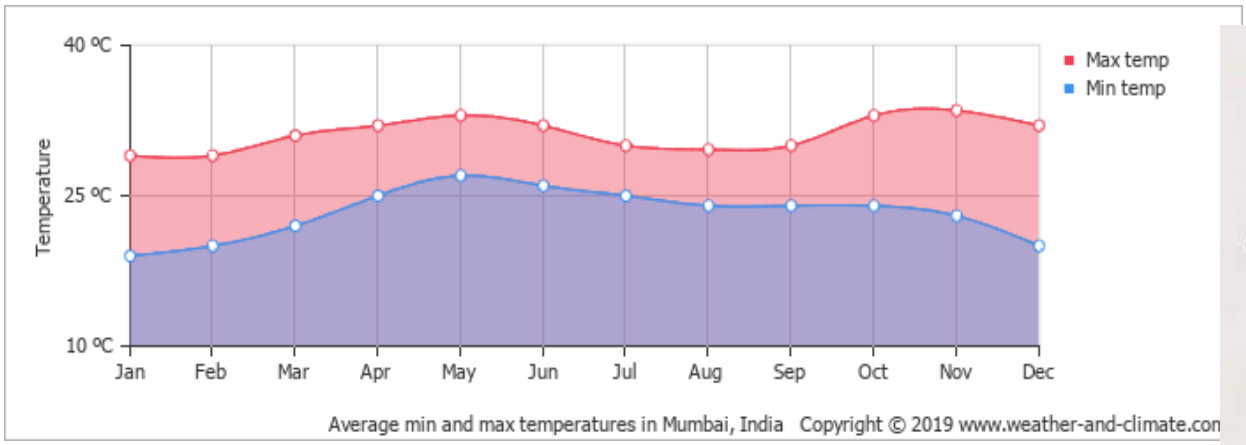
- Settlements should be placed preferably on southern or northern slopes.

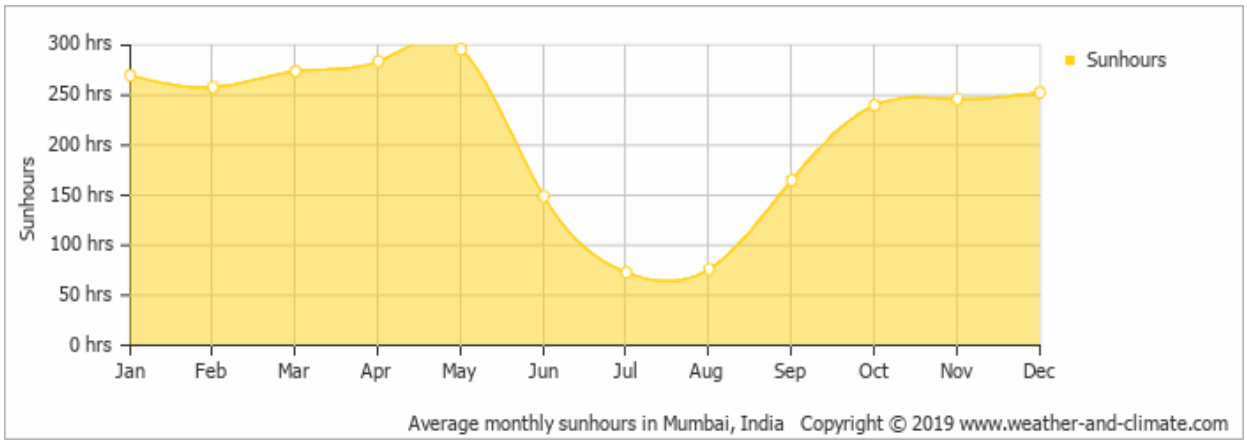








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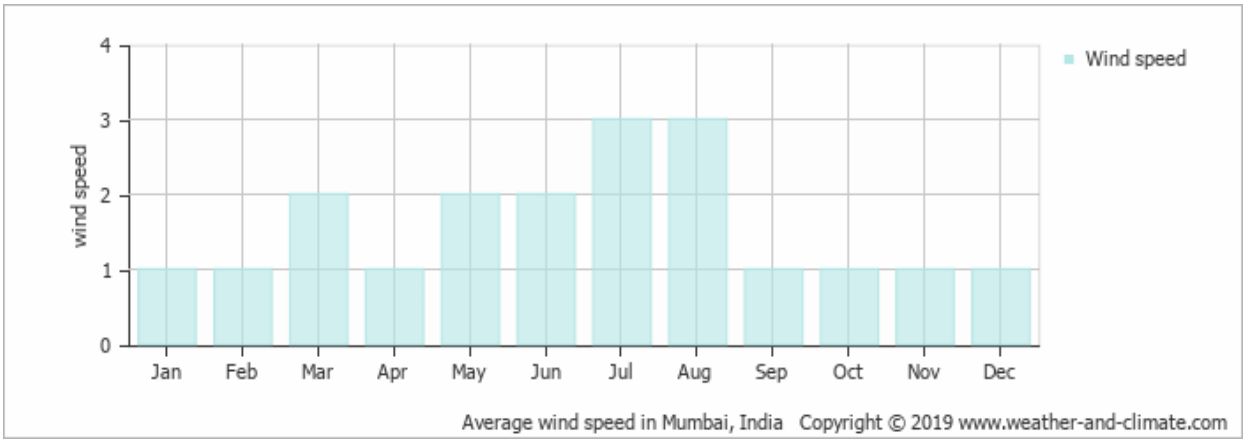
Average monthly sunhours in Mumbai, India Copyright © 2019 www.weather-and-climate.com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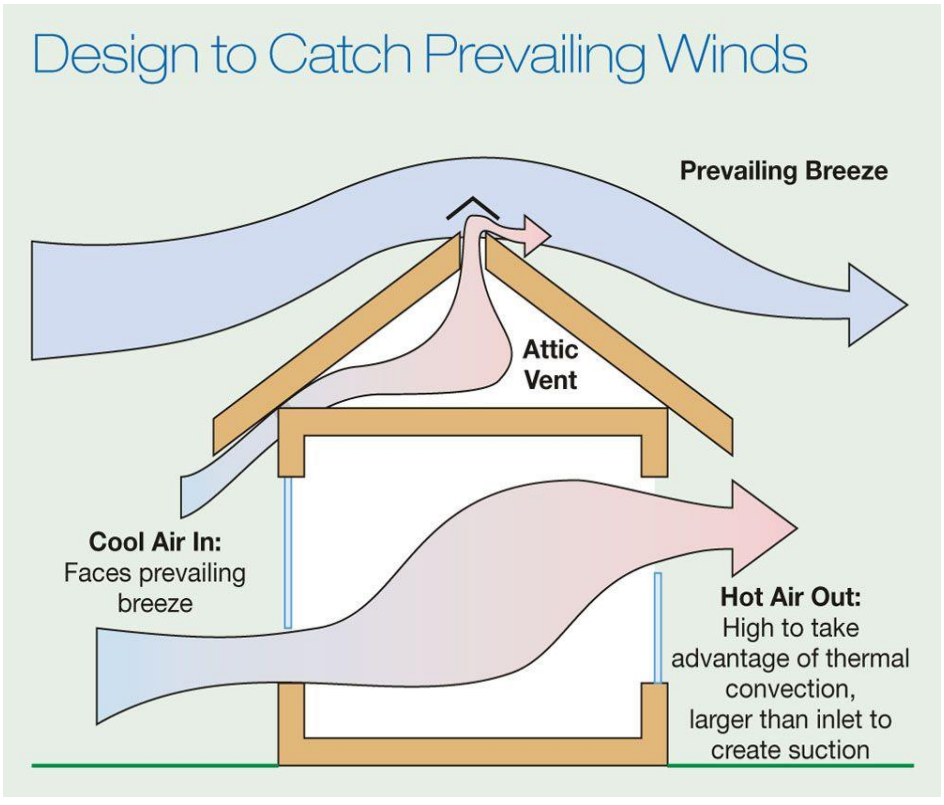
Wind speed
Average wind speed in Mumbai, India Copyright © 2019 www.weather-and-climate.com


Design to Catch Prevailing Winds
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Faces prevailing
breeze
Hot Air Out:
High to take
advantage of thermal
convection,
larger than inlet to
create suction

CASE STUDY 1
NATIONAL GALLERY OF MODERN ARTS

National gallery of Modern Arts was established on 29 March 1954 at Jaipur House. It is the premier art gallery under ministry of culture. It is located very close to India Gate also this was the residential palace of Maharaja of Jaipur. It exhibits around 4000 paintings graphics and sculpture of modern artists.

SITE ANALYSIS

JAIPUR HOUSE – Former residence of maharaja of Jaipur in Delhi.

LOCATION- End of Raj path facing India Gate.

DESIGNED BY- Sir Arthur Bloomfield 1936

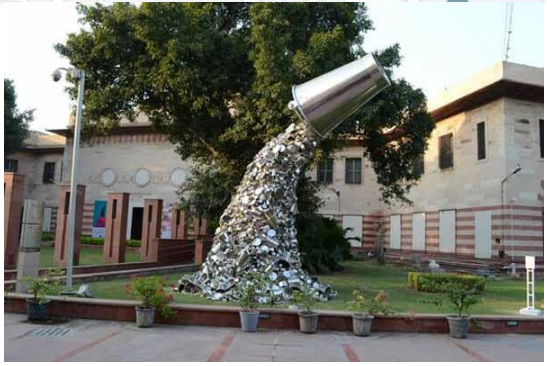
CONCEPT- Butterfly Layout and central dome.

MATERIALS- Red and Yellow Sandstone.

PROJECT AREA- 7.54 acre

ACCESSIBILITY

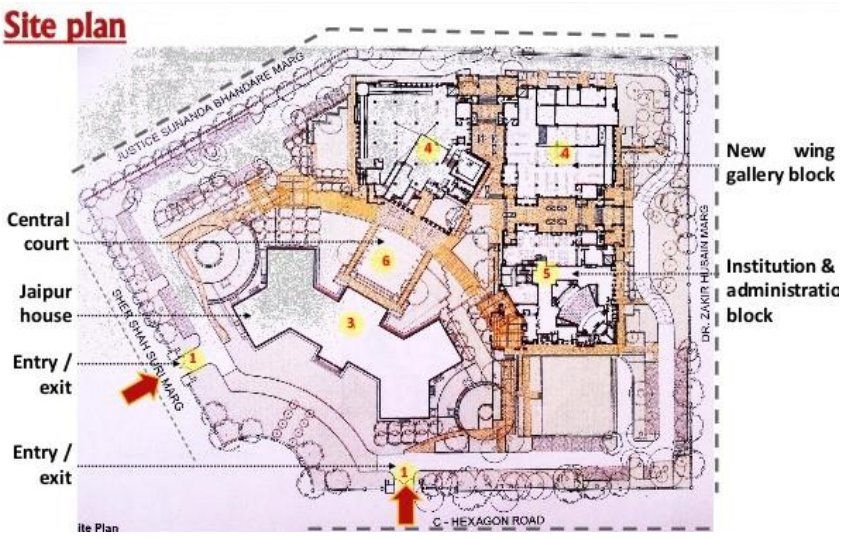
1. Distance from Airport to NGMA is 14 KM by NH48
2. Distance from Railway station to NGMA is 6KM.
3. Distance from bus depot to NGMA is 11.7KM

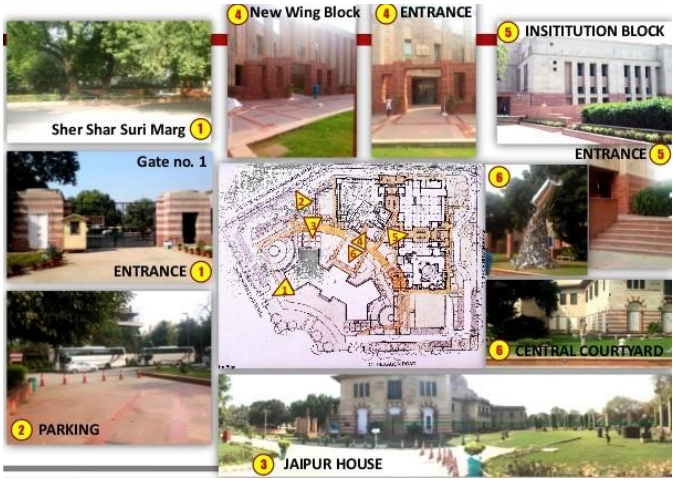


REQUIREMENTS

NEW WING

1. Display areas- 12000 sqm
2. Art Storage – 2500 sqm
3. Conservation Lab- 600 sqm
4. Library -600 sqm
5. Cafeteria – 540sqm
6. Auditorium – 750 sqm
7. Administration and Workshop – 4443 sqm
8. Services and Circulation – 3000 sqm
9. Underground Parking – 1383 sqm



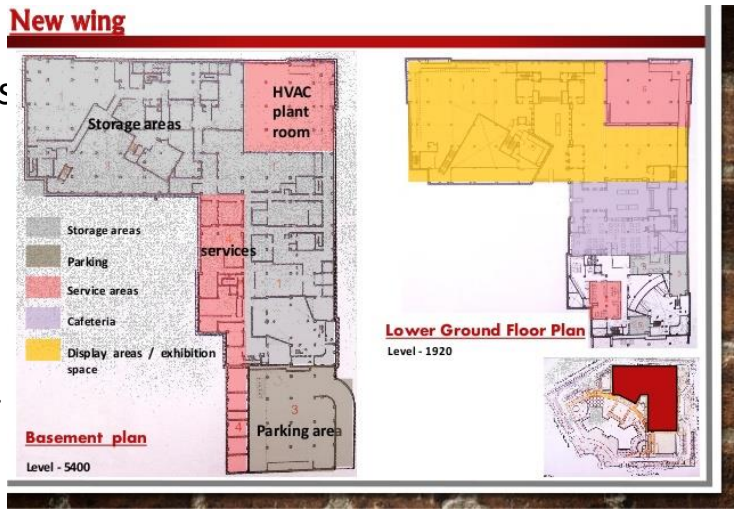


PARKING

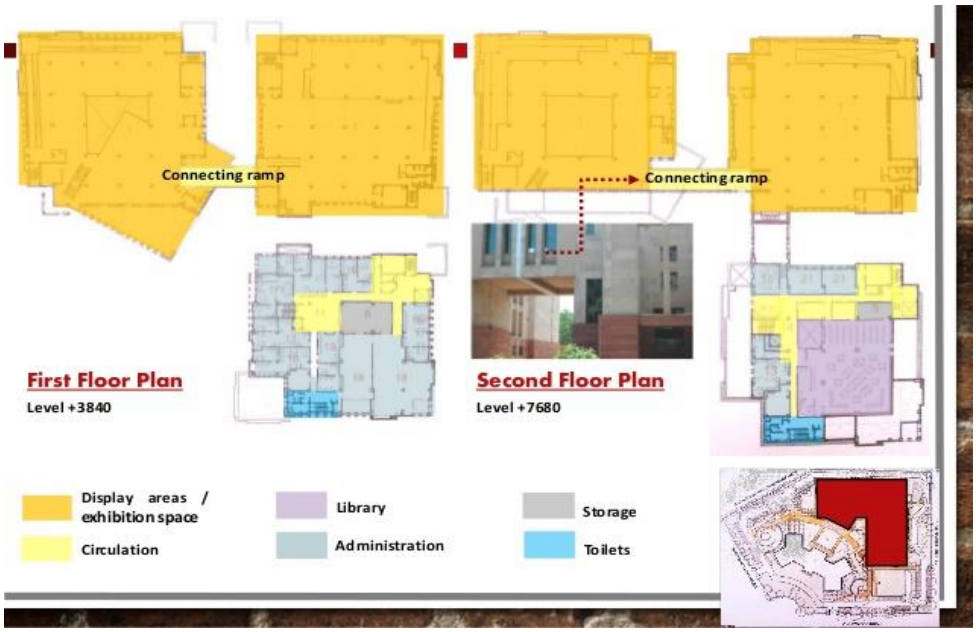
1. Underground Parking – 15 cars.
2. Surface Parking – 264 cars
3. Two Wheeler Parking -50

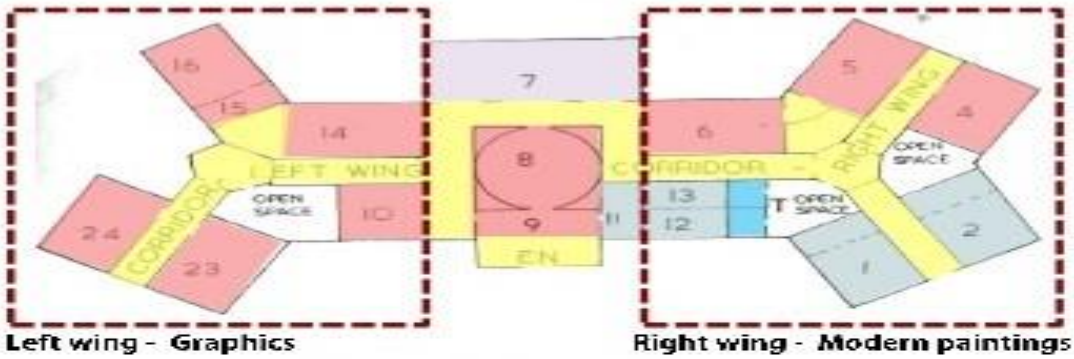
BASEMENT PLAN AND

LOWER BASEMENT PLAN



The lowest basement stretches continuous
Under the three blocks connecting
Them seamlessly to various stores, plant
Rooms, workshops, and other related
Services. In this way the entire service
Infrastructure is contained within the low-
-ermost level and is connected through
Secured freight elevators , and services
Stairs to the display galleries ,photography, conservation laboratories
and administration areas.





Ground Floor Plan

CASE STUDY 2
M F HUSSAIN ART GALLERY

Maqbool Fida Husain was known as M F Husain born 17 September 1915 Pandharpur, Bombay ,India. He was an Indian painter , regarded as India's most prolific , controversial, and world-renowned artist. He was a modern Indian painter of international acclaim, and a founding member of Bombay Progressive Artists group. He died 9 June 2011 and also awarded by Padma Shri 1966 ,Padma Bhushan 1973 ,Padma Vibhushan 1991.

SITE ANALYSIS

ARCHITECTURAL GROUP- Romi Khosla Design Studio

CHIEF ARCHITECTS- Romi Khosla , Martand Khosla

CLIENTS NAME- Jamia Milia Isliamia University , New Delhi.

DESIGN TEAM- Rajnish Pant

PROJECT LOCATION & YEAR- Jamia Milia Isliamia University , 2007-2008

CONTRACTOR- Zamair Khan , New Delhi

The architects chose white marbles in the canteen and white metal louvers in the art gallery to express this contemporary identity . The art gallery has become a community space for gathering alternative expressions of culture and identity. This role signalled the canteen and the art gallery as iconic models of architectural expression in contemporary Indian academic institutions .

The art gallery has three main parts to it. The front gallery that is naturally lit and primarily designed for the display of popular art and student exhibitions . The second space is the main internal gallery which is light by controlled light and can be divided into two smaller galleries with the help of the central pivoting wall . This gallery is designed for the great university art collection, as well as external artists who want to exhibit there work here . The third exhibition space is the open air sculpture court at the rear of the buildin

Other then this , the art gallery also has two artist studios adjacent to the sculpture court which are designed for short term stay of visiting Artists.

CLIMATE

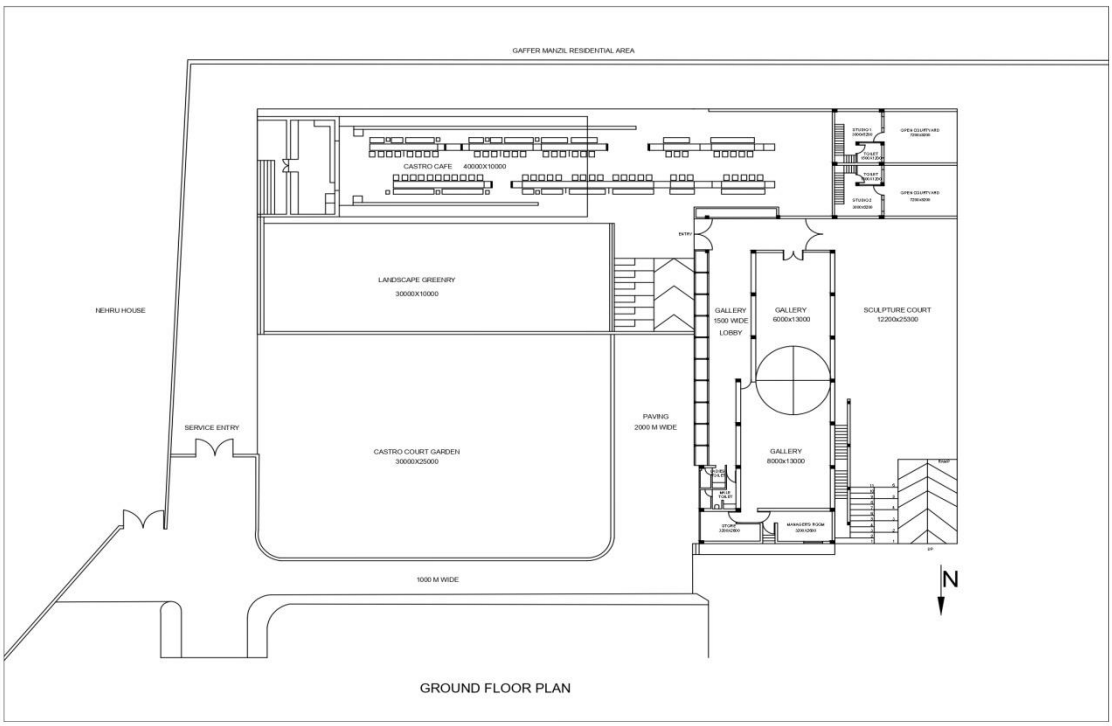
Summer Temperature – 31C – 47C
Winter Temperature – 18 C -1C
Rainfall amount- 800MM
Humidity falls- 34.9%

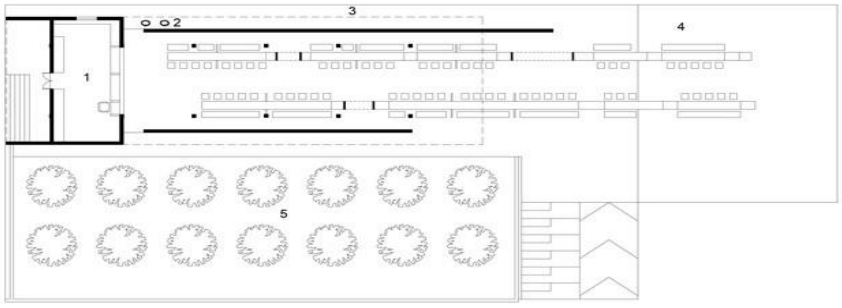
SOIL CONDITIONS

Alluvial Soil
Fertile condition

REQUIREMENTS

Gallery 1 – 78 sqm
Gallery 2 – 104 sqm
Manager' s Room - 9 sqm
Store Room – 9 sqm
Sculpture Court – 308 sqm
Studio 1&2 - 8 sqm each
Toilet 1&2 – 5 sqm each
Open Courtyard - 38 sqm





Ground floor plan

Northwest elevation

Southeast elevation

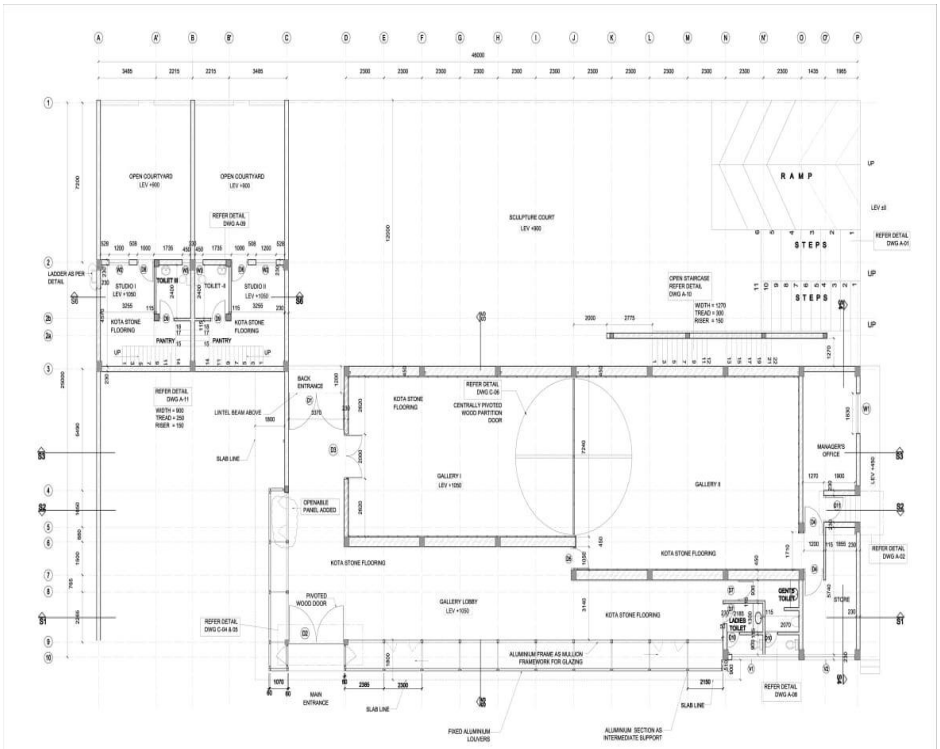
10 m

5 m

0 m

LEGEND

1 - Kitchen
2 - Handwash
3 - Roof line
4 - Elevated platform
5 - Lawn for outdoor sitting



LITERATURE STUDY 1
AMDAVAD NI GUFA

Amdavad Ni Gufa is an underground art gallery in Ahmedabad India. It exhibits works of the Indian artist M F Hussain . The gallery represents a unique just a postion of architecture and art.The cave like underground structure has a roof made of multiple interconnected domes, covered with a mosaic tiles. On the inside , irregular tree- like columns support the domes. It was earlier known as Hussain- Doshi Ni Gufa.

Amdavad ni Gufa was designed to demonstrate the collaboration between an artist and architect. An underground gallery housing the works of artist Maqbool Fida Husain, Doshi's design was inspired by a discussion between the two that occurred thirty years prior to the project. It was about a response to climate, and the benefits of interred spaces.

In designing the landscape and entrance, the architect connects the building to the extended world.

"Amdavad Ni Gufa , designed as an art gallery, transformed and became a living organism and sociocultural centre due to its unusual combination of computer aided design, use of mobile ferro- cement forms and craftsmanship by local crafts people using waste products."

" The form and space of Gufa animate the mysteries of light and memories . Challenges between an artist and an architect give birth to the most unexpected . Searching the uncommon meant raising fundamental questions – what is the meaning of function, space and technology – amidst structure and form."

Porcelain mosaic tiles reflect sunlight and mitigate heat, covering the tortoise shell- inspired roof that shelters the undulating cave- like interiors below.

The shells are handmade from reinforcing bars and mesh covered with cement. This is covered with compacted vermiculite, followed by mosaic pieces.

SITE ANALYSIS

ARCHITECT- Ar. B. V. Doshi
LOCATION – Ahmedabad
CLIENTS NAME- M.F. Husain
CONSTRUCTION PERIOD – 1992-1995
PROJECT TYPE – Art Gallery

CONCEPT

The Buddhist caves of Ajanta and Ellora inspired Doshi to design the interior with circles and ellipses, which Husain wall paintings are inspired by Palaeolithic cave art.

The interior is divided by tree trunk or columns similar to those found on stoneheadge.

Computer assisted planning facilities were used resolve to the structure unorthodox design.

The domes are inspired by the shells of tortoises and by soap bubbles.

The Mosaic tiles on the roof are similar to those found on the roofs of the Jain temples at Girnar, and the mosaic snakes is from Hindu mythology.

The walls were painted as canvas painting with bold strokes and bright colours.

CLIMATE

Summer Temperature – 29 C- 41C
Winter Temperature – 21 C – 12C
Rainfall amount – 205 MM
Humidity falls – 55%

CONSTRUCTION

A simple floor of wire mesh and mortar was used instead of a traditional foundation.

All the structure ‘s components are self supporting.

Ferro cement , only one inch thick, wassed for the undulating walls and domes in order to reduce load.

The domes themselves are supported by irregularly shaped inclined columns , similar to those found in natural caves.

Broken crockery and waste tiles were used to cover the dome’s exterior , which bears a transversal mosaic of a snake.

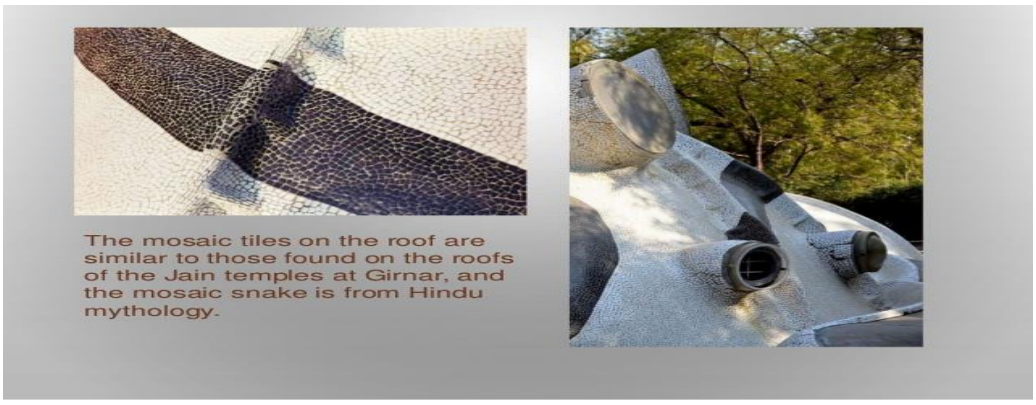
STRUCTURE

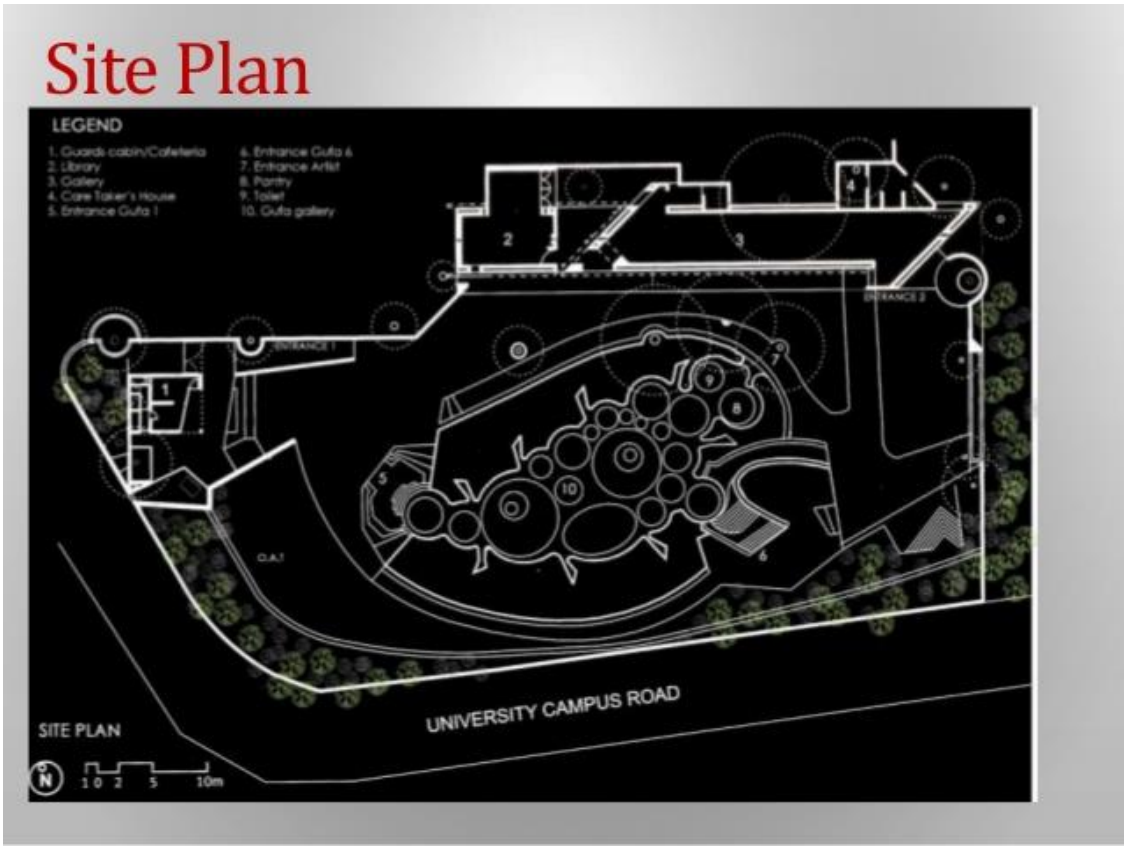
The gallery space is below ground level.

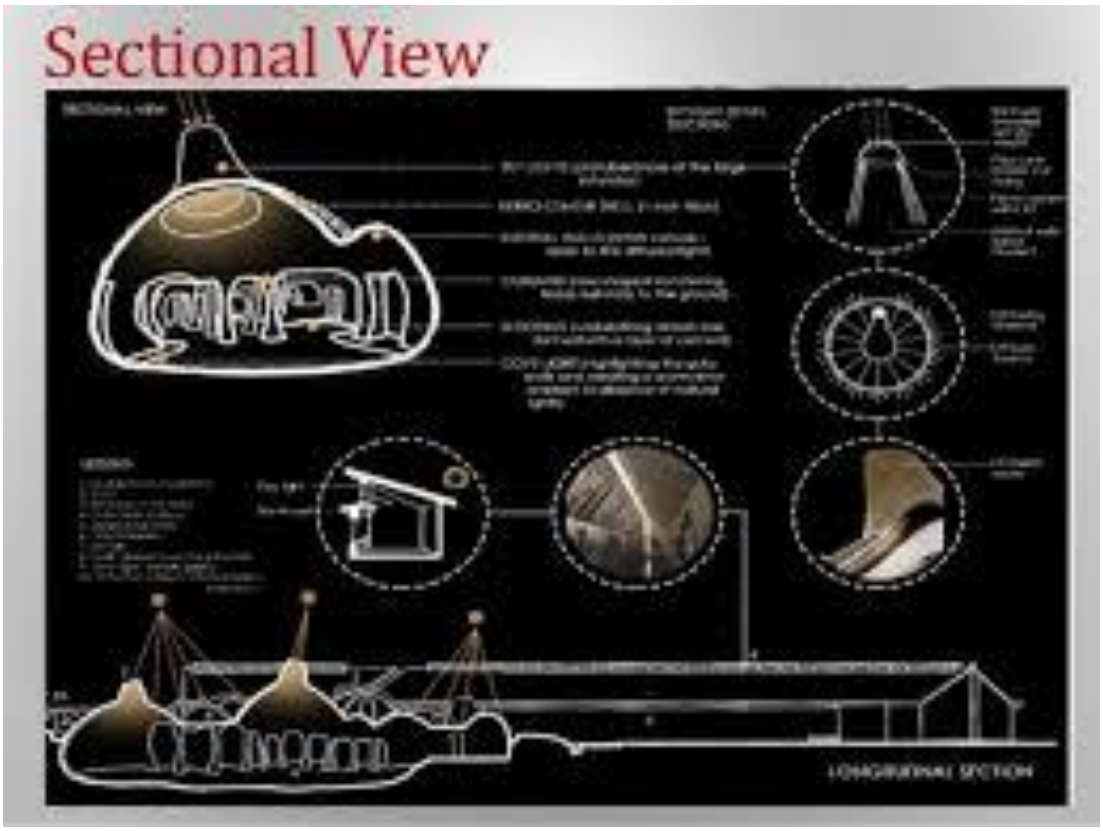
A partially hidden staircase leads to a circular door which opens into a cave- like space.

To display the paintings , the cave has no straight walls, instead using a contribution of the curved dome structure which extends down to the floor.

Light arrives though snouts, creating spots of light on the floor which move around as the day progressive , intended to create a mystic atmosphere.







SITE PLAN AND VIEW

LITERATURE STUDY 2
SABARMATI ASHRAM , GUJARAT

Sabarmati Ashram is located in the Sabarmati suburb of Ahmedabad , Gujarat, adjoining the Ashram road, on the banks of the River Sabarmati , 4 miles from the town hall. This was one of the many residences of mahatma Gandhi who lived at Sabarmati and Sevagram, when he was not travelling across India or in prison. He lived in Sabarmati or Wardha for a total of twelve years with his wife Kasturba Gandhi and followers, including Vinoba Bhave. The Bhagavad Gita was recited here daily as part of the Ashram schedule.

It was from his base here that Gandhi led the Dandi march also known as the Salt Satyagraha on 12 March 1930. in recognition of the significant influence that this march had on the Indian Independence movement the Indian government has established the ashram as a national monument.

The ashram now has a museum , the Gandhi Smarak Sangrahalya . This had originally been located in Hridaya kunj, Gandhi's own cottage in the ashram. Then in 1963 , having been designed by the architect Charles Correa, the museum was built. The Sanrahalaya was then re- located into the well- designed and well- furnished museum building and was inaugurated by Jawaharlal Nehru, Prime Minister of India on 10 May 1963. Memorial activities could then continue.

Many buildings in the Ashram have names. There is a rich history of Gandhi's naming practices. At least some of the names of the buildings in the ashram , such as Nandini , and Rustom Block date back to the nineteen twenties , as is evident in a letter Gandhi wrote to Chhaganlal Joshi , the Ashram 's new manager after Maganlal Gandhi's death in April 1928.

SITE ANALYSIS

ARCHITECT – Ar. Charles Correa

LOCATION – Ahmedabad

PROJECT AREA – 36 Acre

PROJECT PERIOD – 1915- 1917

PROJECT TYPE – Gallery , Museum

BUILDING MATERIALS

WALLS- Used bricks

FLOORING- Stone flooring

Doors – Wooden Door

CLIMATE

Summer Temperature- 29C - 41C

Winter Temperature – 21C – 12C

Rainfall amount – 205MM

Humidity – 55%

CONCEPT

Each building group in casual mandering pattern, creating pathways along which visitors progresses towards the centrality of water courtyard.

The site on the Sabarmati river bank, it is the part of the larger ashram complex and is integrated into its garden.

Charles Correa has took the words of Mahatma Gandhi " I don't want my house to be walked on four sides and my windows to be stuffed.

I want cultured o all the land to be blown about my houses as freely as p but I refuse to be blown off my feet by any of them."

CONSTRUCTION

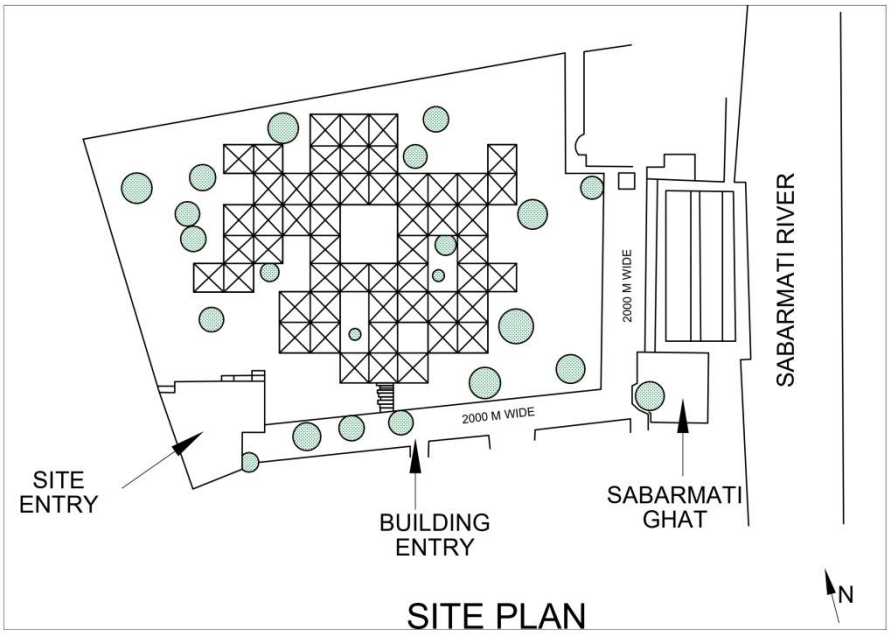
The only additions are the RCC channels which act as a beam and as rainfall conducts and which permit additional construction to be added in furture.

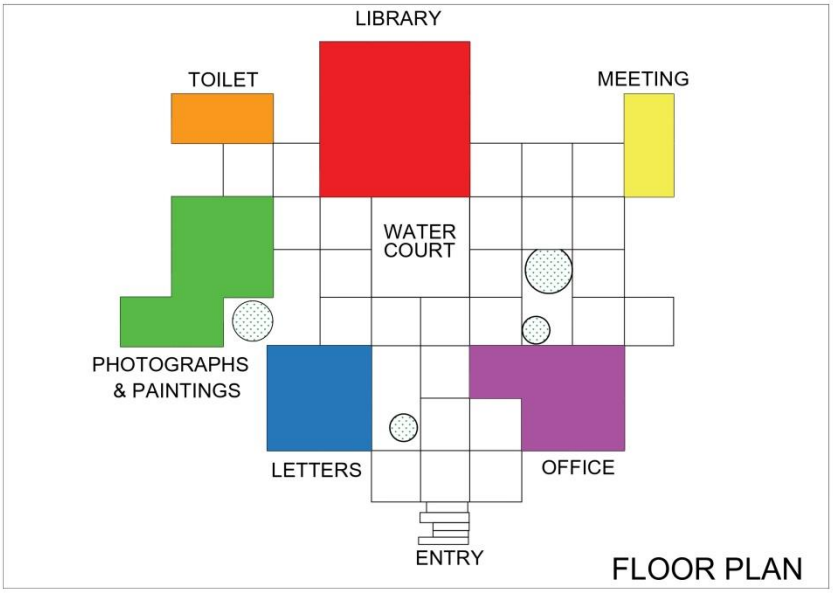
No glass windows are used anywhere in the buildings , light and ventiliation being provided by operable wooden louvers.

The Museum uses a simple but delicately detailed post and beam structure.

Load Bearing brick columns support concert channels , which are both support the wooden roof and direct rainwater .

The foundations is concrete and is raised about foot from the ground .





SPACES

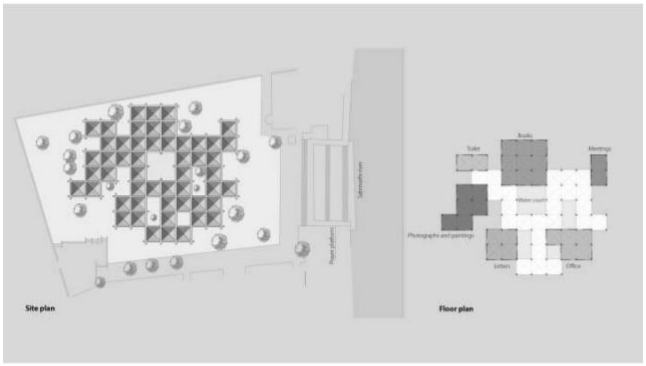
Five interior rooms contain the collection of the Museum .

The rooms are enclosed by brick walls and wooden louvered screens .

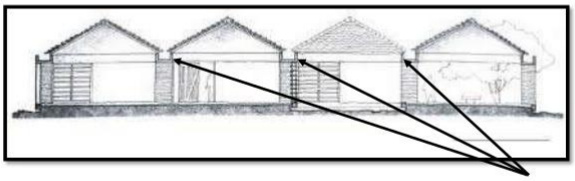
A square , uncovered shallow pool is located between the five rooms .

All five rooms are part of 6 M square modle.

Correa's subtle changes of the enclosure allow for variety in the module's lighting , temp , and visual permeability.

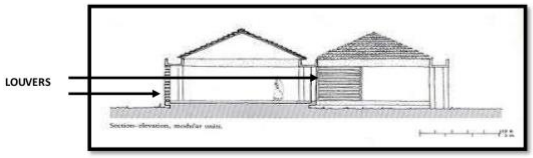


Site plan Plan

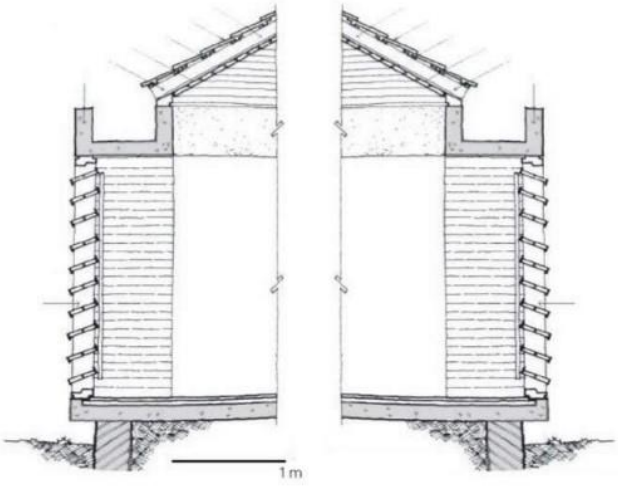


Sectional Elevation

RAIN WATER HARVESTING SYSTEM



Sectional Elevation



COMPARTIVE CHART

LEGENDS	CASE STUDY 1 M.F. HUSAIN ART GALLERY	CASE STUDY 2 NATIONAL GALLERY OF MODERN ART	LITERATURE STUDY 1 AMDAVAD NI GUFA	LITERATURE STUDY 2 SABARMATI ASHRAM	STANDARDS
REQUIREMENTS					
Gallery	76 sqmt	82 sqmt	37 sqmt	37 sqmt	39 sqmt
Exhibition Area	308 sqmt	12000 sqmt	1800 sqmt	809 sqmt	371 sqmt
Ticket Room	6 sqmt	5 sqmt	10 sqmt	9 sqmt	4.6 sqmt
Storage	8.32 sqmt	10 sqmt	12 sqmt	15 sqmt	7.4 sqmt
Admin Office	8.32 sqmt	12 sqmt	-	12 sqmt	18.5 sqmt
Library		600 sqmt	450 sqmt	1000 sqmt	-
Toilets	4.8 sqmt	5 sqmt	5 sqmt	4 sqmt	4.6 sqmt
Parking	No particular parking	Underground Parking-15 cars Surface Parking - 264 cars Two wheeler parking-50	Private Parking available	Private Parking available	
Site Area	810 SQMT	7.54 Acre	7 Acre	36 Acre	
Natural Light design	There is natural light provided to enhance the gallery	There is natural light provided to enhance the gallery	There is natural light provided to enhance the gallery	There is natural light provided to enhance the gallery	Provide more natural light than artifical light just to enhance the gallery or exhibition hall
Educational area	No library is provided	Library is provided	Library is provided	Library is provided	Learning oriented goals are truely acheived when people are together in public place
Design or concept	Materials,landscaping and building orientation	Butterfly shaped building also played with natural light	Caves, sheels of tortoise, broken crokery, mosaic tiles etc	Arrangements are made by vastu also provided the water body at the centre	Elements of an exhibition should support & contribute to its ideas and tone The exhibition path itself should make new meaning

REQUIREMENTS

ADMIN BLOCK:				
	REQUIREMENTS	PERSON	A/P	AREA
1	ADMIN OFFICE + WASHROOM	1	APCS	30 SQM
2	RECEPTION AREA	1	APCS	2 SQM
3	TICKET AREA + BAGAGE	10	2 SQM/P	20 SQM
4	STORE	1	APCS	20 SQM
5	WAITING AREA	10	2 SQM/P	20 SQM
6	STAFF ROOM	10	5 SQM/P	50 SQM
7	PANTRY	1	APCS	6 SQM
8	RECORD ROOM	1	APCS	15SQM
	TOTAL AREA			108SQM

REQUIREMENTS

DISPLAY AREA				
	REQUIREMENTS	PERSON	A/P	AREA
1	WORKSHOP	25	5SQM/P	125 SQM
	TOTAL WORKSHOP	4	125 SQM	500 SQM
2	O.A.T.	200	2 SQM/P	400 SQM
3	MEMORY LANE	1	APCS	1.2 SQM
	NO. OF VISITIORS	700	1.2 SQM	840 SQM
4	EXHIBITION AREA	1	APCS	2 SQM
	NO. OF VISITIORS /DAY	800	2 SQM	1600 SQM
5	TOTAL TOILETS	16	2.5 SQM/P	40 SQM
6	GALLERY		1.2 SQM/P	2400 SQM
	TOTAL AREA			5780 SQM

REQUIREMENTS

HOSTEL				
	REQUIREMENTS	PERSON	A/P	AREA
1	1 SEATER ROOM	1	APCS	8 SQM
	TOTAL ROOM	50	8SQM/R	400 SQM
2	TOILETS	1	3 SQM/P	3 SQM
	TOTAL TOILETS	50	3 SQM	150 SQM
3	2 SEATER ROOM	1	APCS	24 SQM
	TOTAL ROOM	75	24 SQM	1800 SQM
4	KITCHEN MESS	5	APCS	50 SQM
5	SETTING AREA	200	1.5 SQM/P	300 SQM
	TOTAL AREA			2700 SQM
CAFETERIA				
1	CAFETERIA	268	2 SQM/P	536 SQM

REQUIREMENTS

EDUCATIONAL BLOCK				
	REQUIREMENTS	PERSON	A/P	AREA
1	DIRECTOR ROOM	1	APCS	20 SQM
2	DIRECTOR 'S P.A. ROOM	1	APCS	15 SQM
3	RECEPTION + WAITING	15	2 SQM/P	30 SQM
4	STUDIO	25	2SQM	50 SQM
	TOTAL STUDIO	6	50 SQM/C	300 SQM
5	LECTURE HALL	25	2 SQM/P	50 SQM
	TOTAL HALL	5	50 SQM/C	250 SQM
6	COMPUTER ROOM	50	2SQM/P	100 SQM
7	TOILET	20	2SQM/P	40 SQM
8	STAFF ROOM	8	2SQM/P	24 SQM
9	CONFERENCE HALL	24	2SQM/P	48 SQM
10	AUDITORIUM	194	2SQM/P	388 SQM
11	LIBRARY	200	2SQM/P	400 SQM
12	ACCOUNT OFFICE	9	5 SQM/P	45 SQM
13	A.H.U.	-	-	18 SQM
14	ELECTRICAL ROOM	-	-	18 SQM
15	STORE	-	-	20 SQM
16	CAFE	-	-	800 SQM
	TOTAL AREA			2586 SQM

AREA CALCULATION

SITE AREA- 5 .1 ACRE

PERMESSIBLE GROUND COVERAGE – 35%

GROUND COVERAGE – 35% OF TOTAL AREA = 7101.5 SQM

F.A.R. = 1

TOTAL BUILTUP AREA = PLOT AREA X F.A.R.

=20290X1 = 20290

NO. OF FLOORS = TOTAL BUILTUP AREA/ G.C.

= 3 FLOORS

SETABCK MINIMUM 6M MAXIMUM 15 M

ACHIEVED GROUND AREA = 6565 SQM

TOTAL AREA ACHIEVED = 19695 SQM

TOTAL F.A.R. ACHIEVED = 0.9

PARKING

2 ECS PER 100SQM

2X 19695/ 100 = 375 CARS

TOTAL NO OF CARS = 375

AREA PER CAR = 15 SQM

TOTAL PARKING AREA = 15x375 = 5610SQM

CONCEPT

CONCEPT has been derives from " FORM FOLLOWS FUNCTION"

And the form is derived from GEOMETRICAL SHAPES . Geometry is the fundamental science of forms and their orders .

Geometric figures , forms , and transformations build the material of Architectural design. In the history of fixed tools for architectural tools .

Following design considerations.

Natural light and ventilation is provided with maximum number of windows with different sizes angles. The form is traditional and eye to attract more visitors.

Sunshade device proposed on building to create shade on facades.

A large artifical late at the left of site helps in passive cooling.

LANDSCAPING forms an important feature that integrates different spaces of design and reminds the guest of the back waters of design .

Treatment of boundaary wall was also a issue of concern sp plants all its perimeter will add an organic touch to the environment.

PARKING is provided at the north – east and north- west and is located very close to all public zones and administration zones.

an attempt has been made to buffer the noise and visibility by creation of earth mounts and green landscaping around the parking lot.

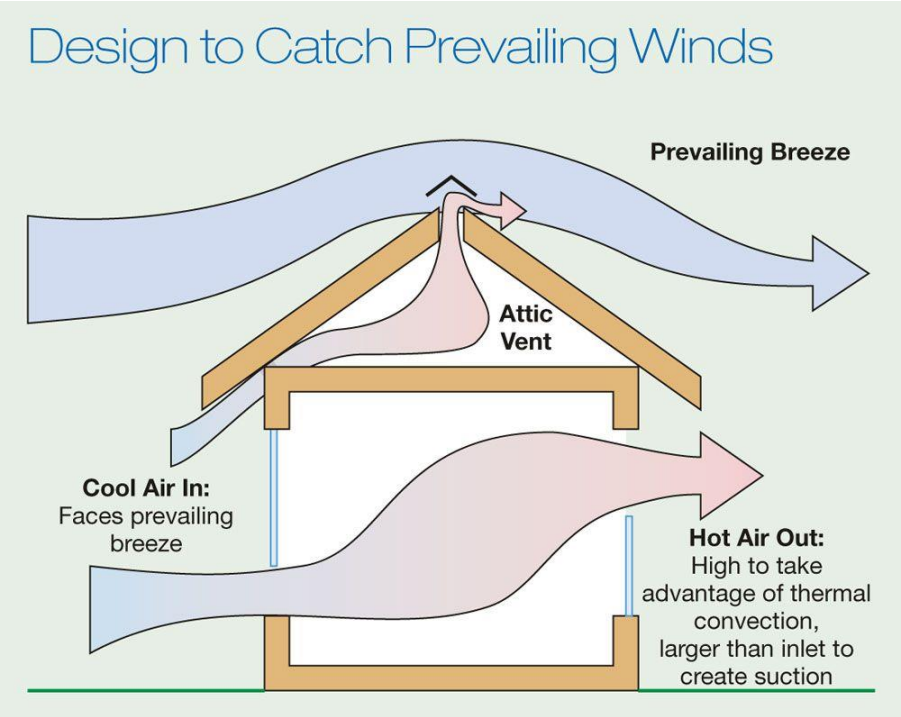
small area of surface parking is also provided for staff on the left side of the entry.

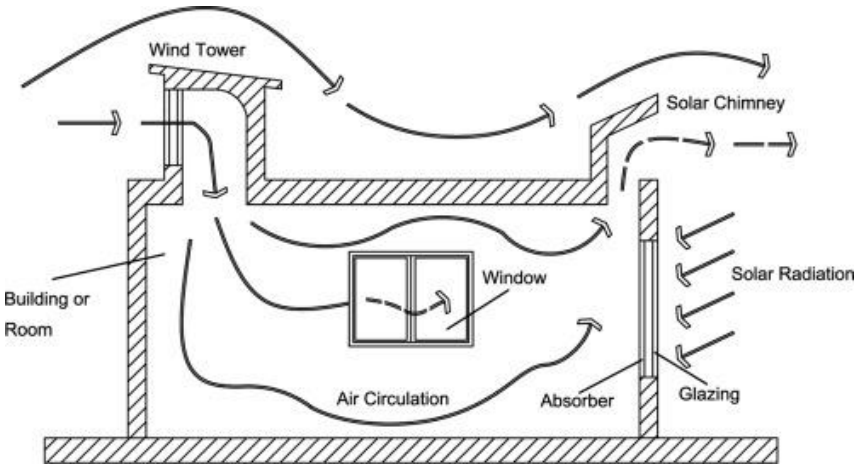
DESIGN CONSIDERATION

Orientating building so that their long facades are exactly perpendicular to wind direction is not requireed .

if the openings were located in adjacent walls, better cross- ventilation resulted from the inlet opening being perpendicular to the wind direction.

Good natural ventilation can reduce or eliminate air conditioning in warm weather, if window are well shaded.





PASSIVE ENERGY SAVING METHODS CAN BE USED

Choosing efficient shading, window size and placement also general building orientation can reduce energy consumption during day time by maximizing the use of daylight.

Uncoursed stone and exposed plaster had been in façade and brick cladding has been used in parapet.

Led lights between used in the whole project for energy saving.

SUMMER SHADING

The selection of suitable plants for shading depends on the building to be shaded . Different types of plants can be selected on the basis of their growth habit to provide the desired degree of shading for various window orientations and situations.

Vertical shading is best for east and west walls and windows in summer, to protect from inteense sun at low angles.

Horizontal shading is best for north- facing windows.

WINTER SHADING

Use deciduous trees and plants particularly to the north of the building to allow the access of winter sun to north windows.

Tall low branching evergreen trees should be kept at sufficient distance from north – facing windows.

LANDSCAPING TYPOLOGY

EDGES ANT ENTRANCE

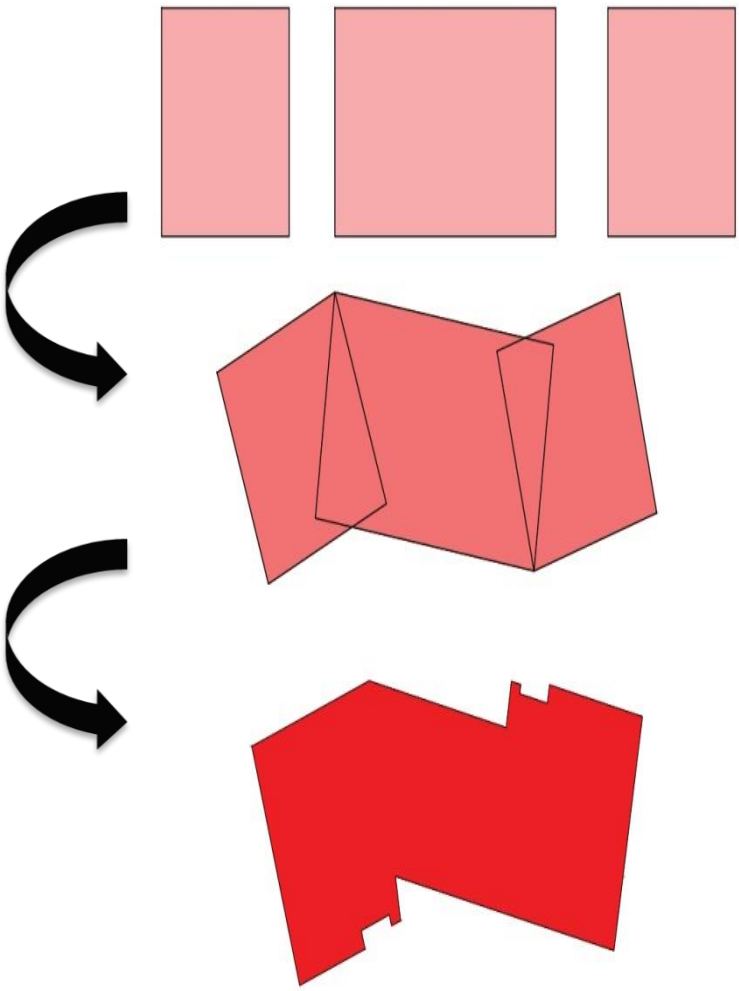
The edges and entrance define physical boundary and transition between campus and surrounding community while creating visually inviting space that provide a positive, welcoming first impression to campus visitors.

SURFACE PARKING

Surface parking on the site consists of smaller lots , adjacent to building that are used primarily for vehicle accessibility or loading / unloading.

EDUCATIONAL BLOCK

Two squares and one rectangle are mixed within to form the shapes which gives the protection from the outer world.

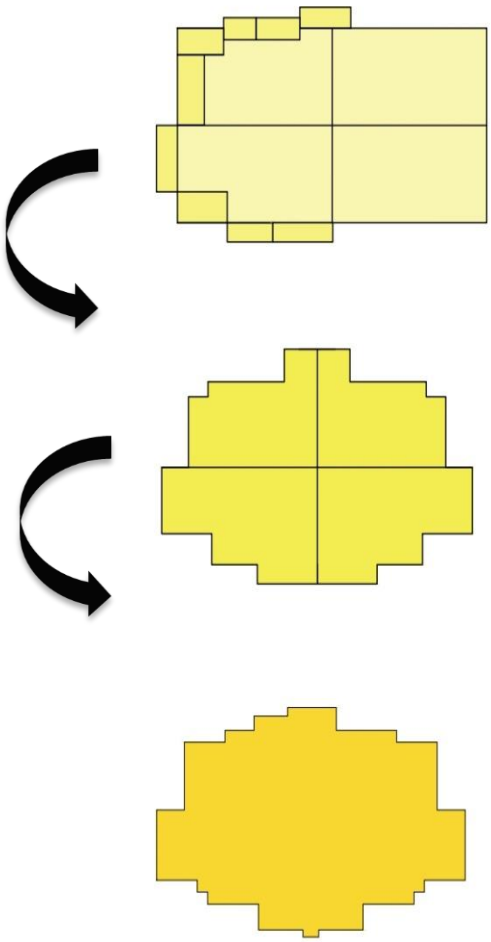


HOSTEL BLOCK

A famous and common geometrical shape has been taken and further divided into two half parts which shows the actual meaning of the hostel which is made for both boys and girls.

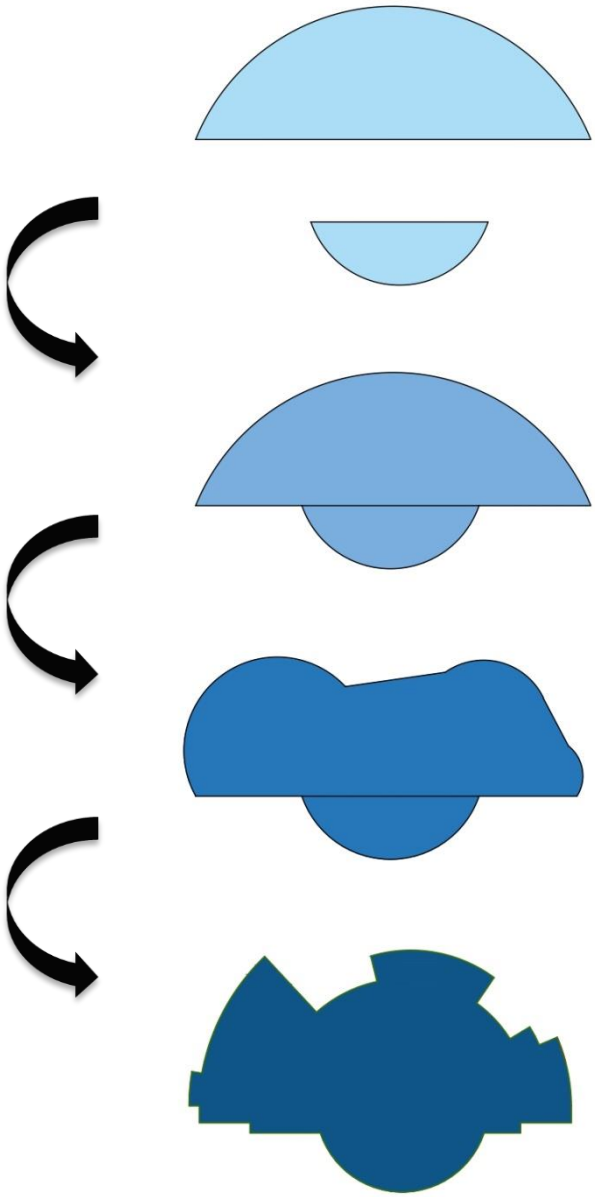
And then the rectangle is added and subtracted according to the planning of the block .

The final form is created in a zig –zag form which looks like a staircase.



RESTAURANT

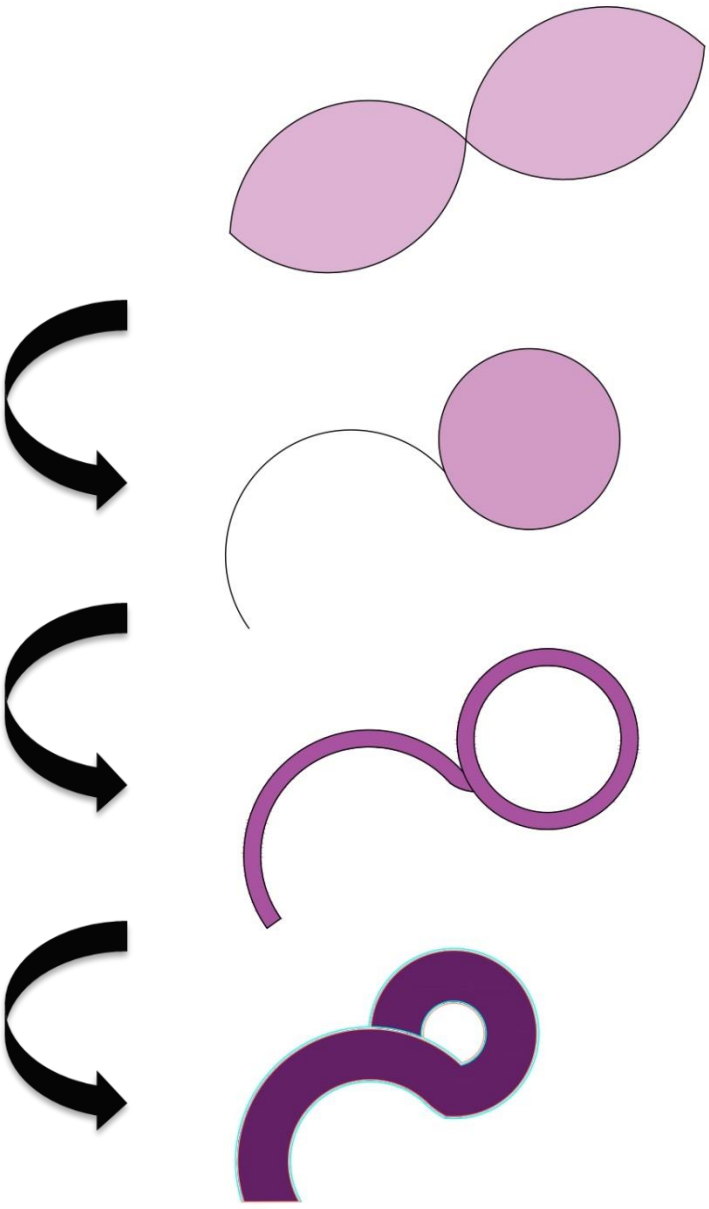
Two semi circles are joined to create a form by which some portion of the form is added and subtracted to create the final layout of the block as functioned after.



MEMORY LANE

The infinity shape is taken, as the name defines the beautification of the shape . This form is taken to beautify the shape of the lane .

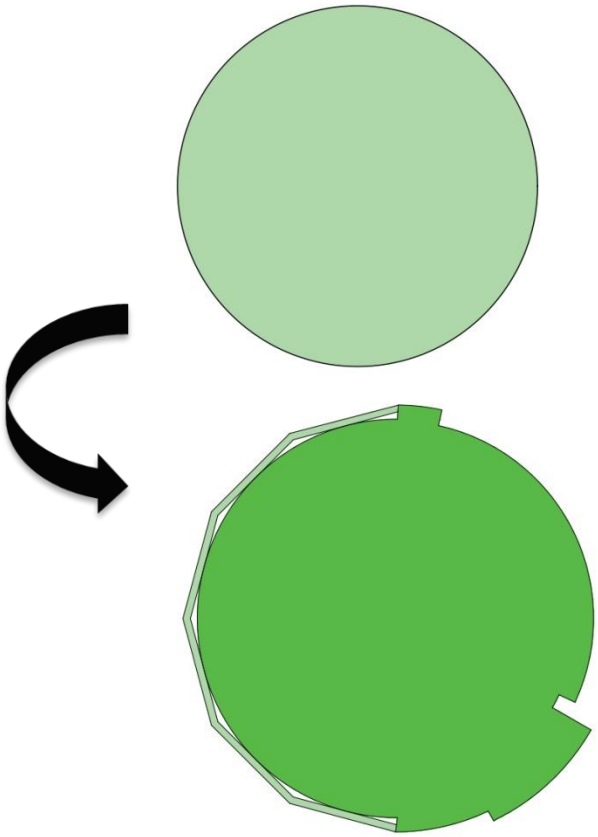
This memory lane will include all the work of R K Laxman Sir. From his childhood to his death.



ADMIN AND DISPLAY BLOCK

The Circle is the strongest two dimensional shape . The reason is being that stress is distributed equally along with the arc instead of concertrating at any point .

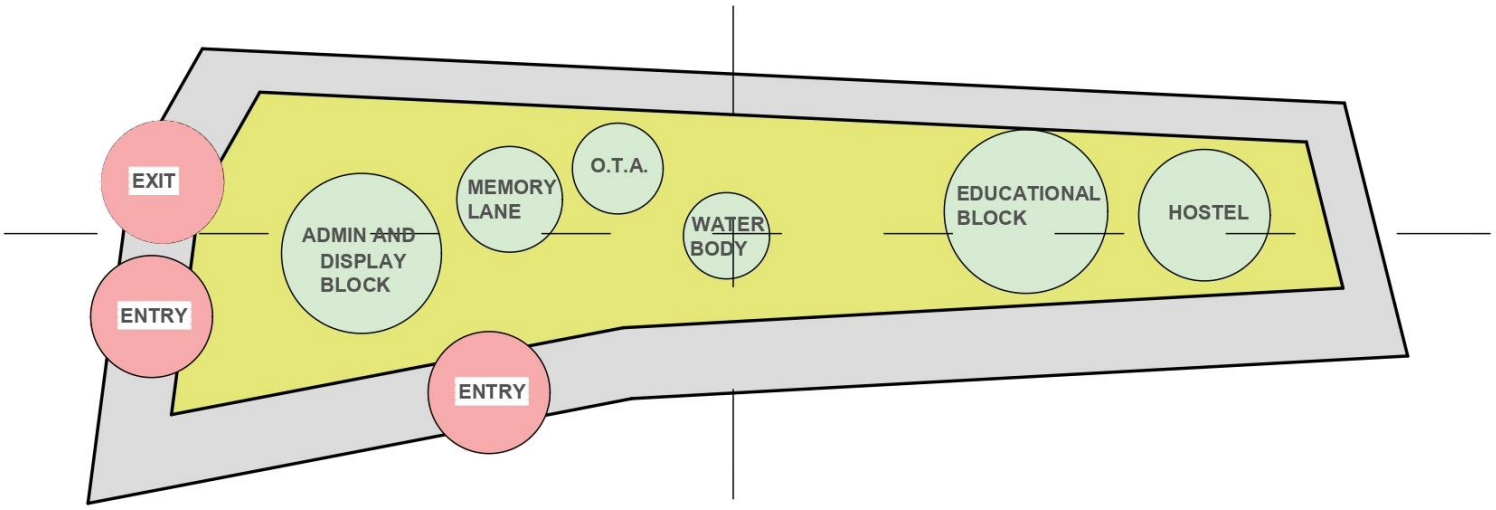
By the form of circle display area and admin block is placed and functioned accordingly.



SITE ZONING

Zoning of the site is divided by the blocks according to the zone private , public and semi public areas.

The blocks will function according to the footfall of the visitors and students who will stay there.

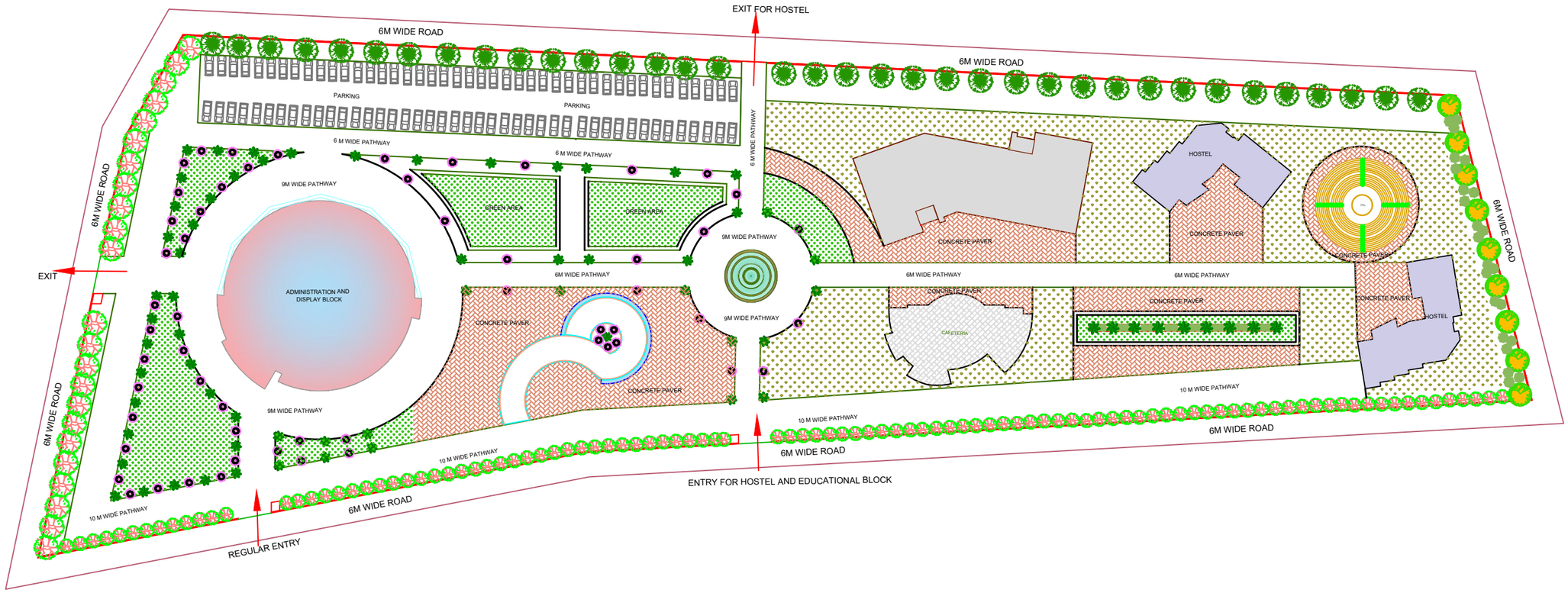


CONCLUSION

The aim of the design is to lower both daytime and night time temperature in and around the environment buildings as much as possible to be comfort conditions.

This can be achieved by keeping building envelopes or surface areas of buildings minimally exposed to the sun.

After finalizing data collected , the project appeared in a more clear way. In this research I had collect all the information about the general zoning of the site is created based on the previous analysis of case studies and space program, finally selected site based on the important criteria . At the end, all the previous chapters have developed a clear vision of how I would want my project to function an look like. Having this thesis written will help me in the design stage in the following step.



SITE AREA- 20290 SQM
PERMISSIBLE GROUND COVERAGE- 35% = 7101.5SQM
F.A.R.- 1
TOTAL BUILDUP AREA- 20290 SQM
NO. OF FLOOR = 3 FLOOR
ACHIEVED GROUND COVERAGE- 6565 SQM
TOTAL ACHIEVED AREA- 19695 SQM

CONCRETE PAVER
SAND STONE
GRASS
SAND FLOORING
PATHWAY

TREES SCHEDULE

TREE PLAN	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD UPTO
	Grevillea Robusta	Silver Oak	15m	6m
	Delonix Regia	Gulmohar	18m	12m
	Cassia Fistula	Amaltus	13.5m	5m
	Peltophorum Ferrugenum	Pili Gulmohar	9m	8m
	Polyalthia longifolia	Ashoka	18m	5m
	Reystonea Regia	Bottle plam	12m	3m
	Callistimon lenceolatus	Bottle Brush	6m	5m
	Plumeria Alba	Safed Champa	6m	5m

Topic:-

SITE PLAN

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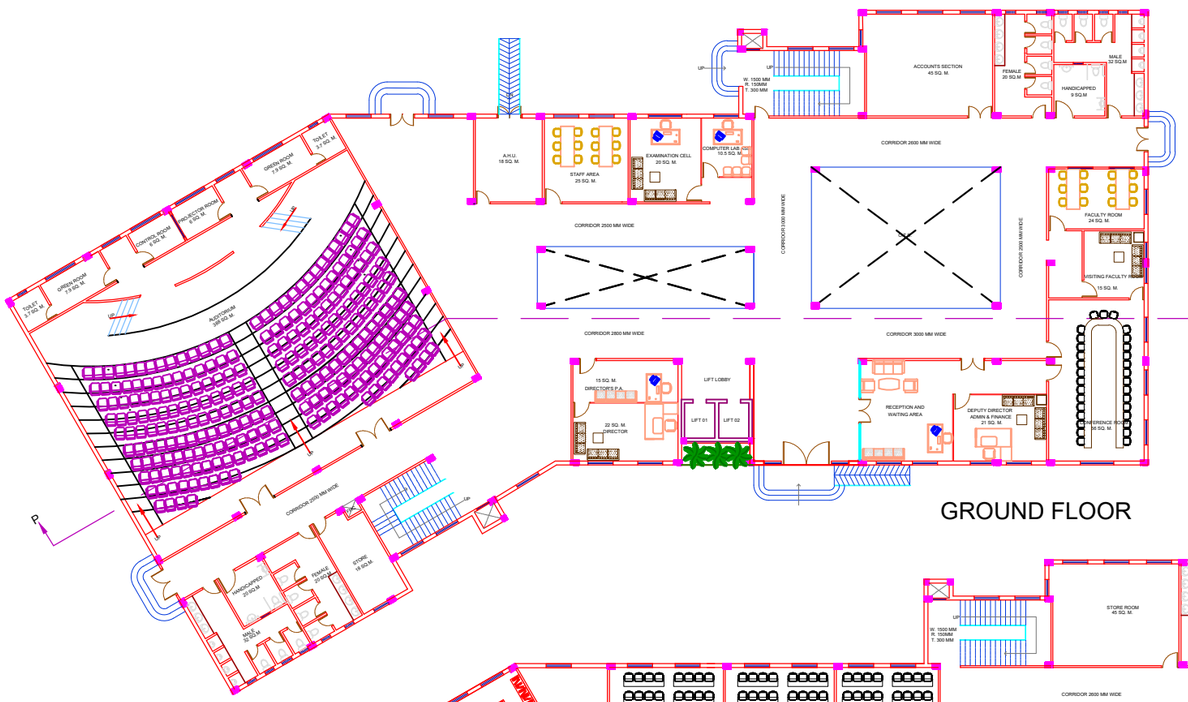

Topic:-

FLOOR PLANS OF EDUCATIONAL BLOCK

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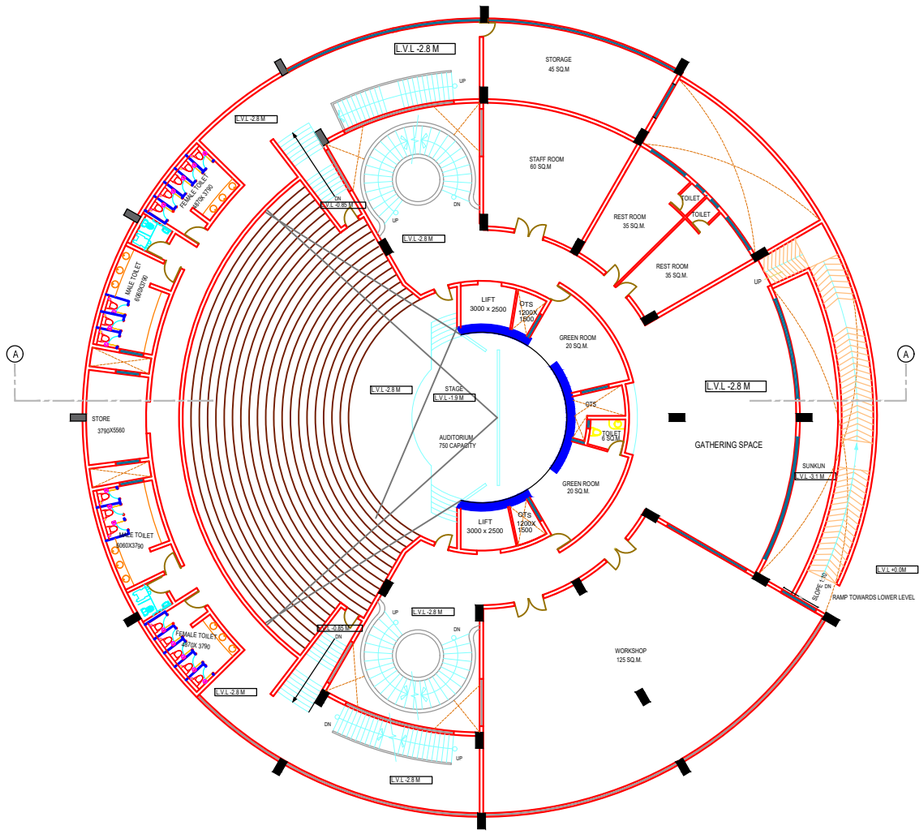
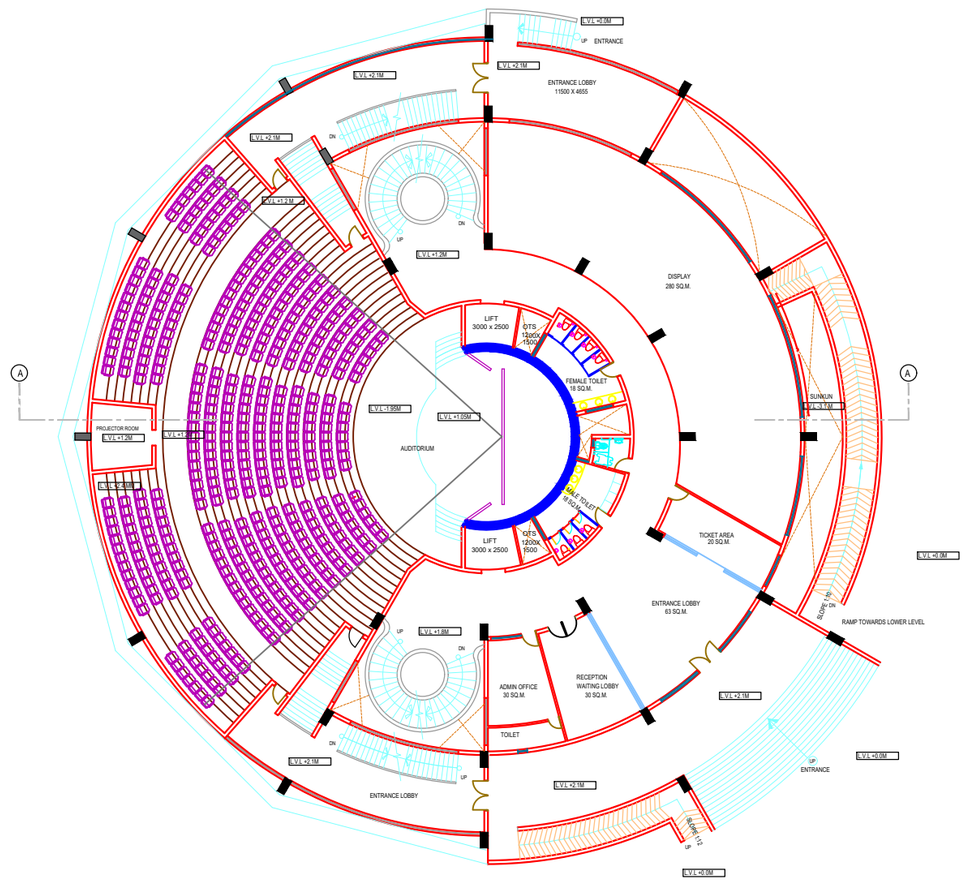


LOWER GROUND FLOOR PLAN



GROUND FLOOR PLAN

Topic:-

ADMINISTRATION &
DISPLAY BLOCK

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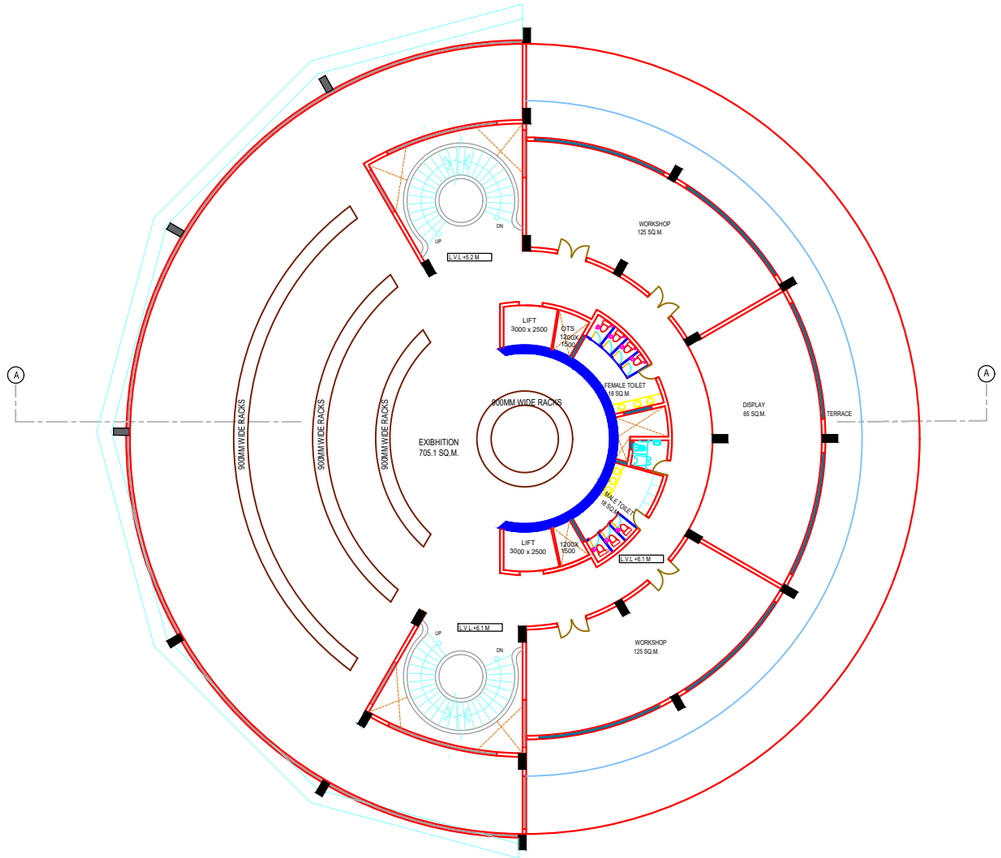
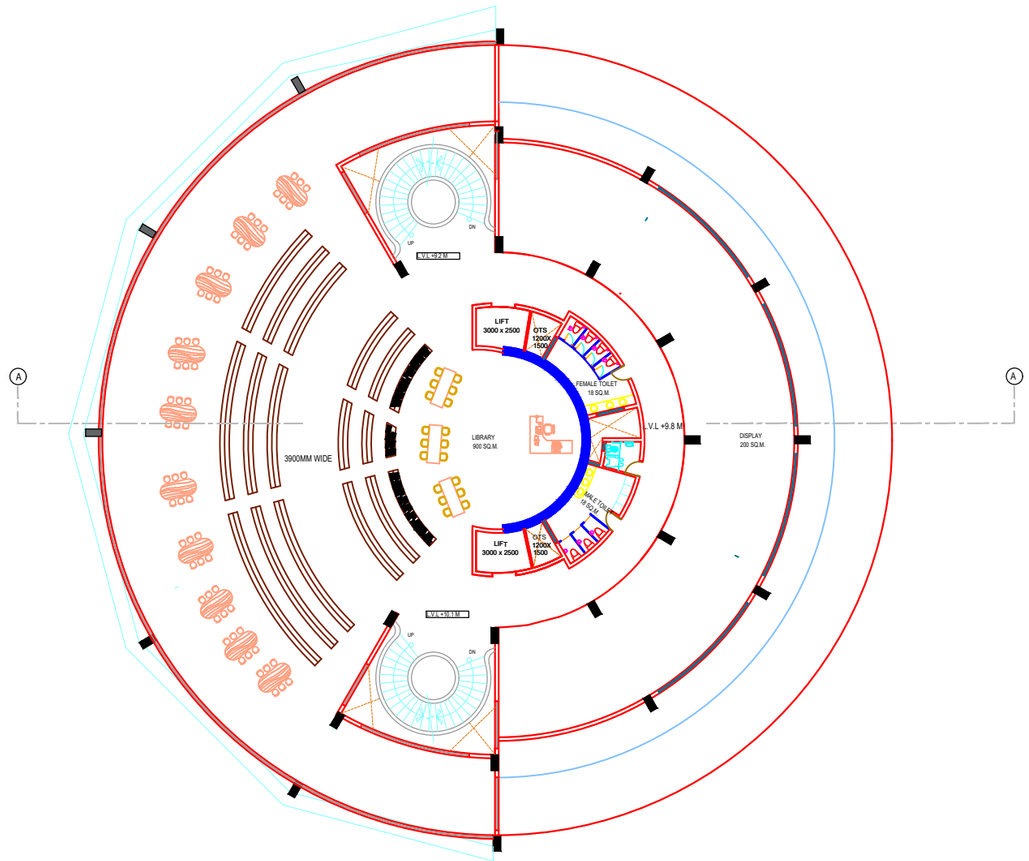
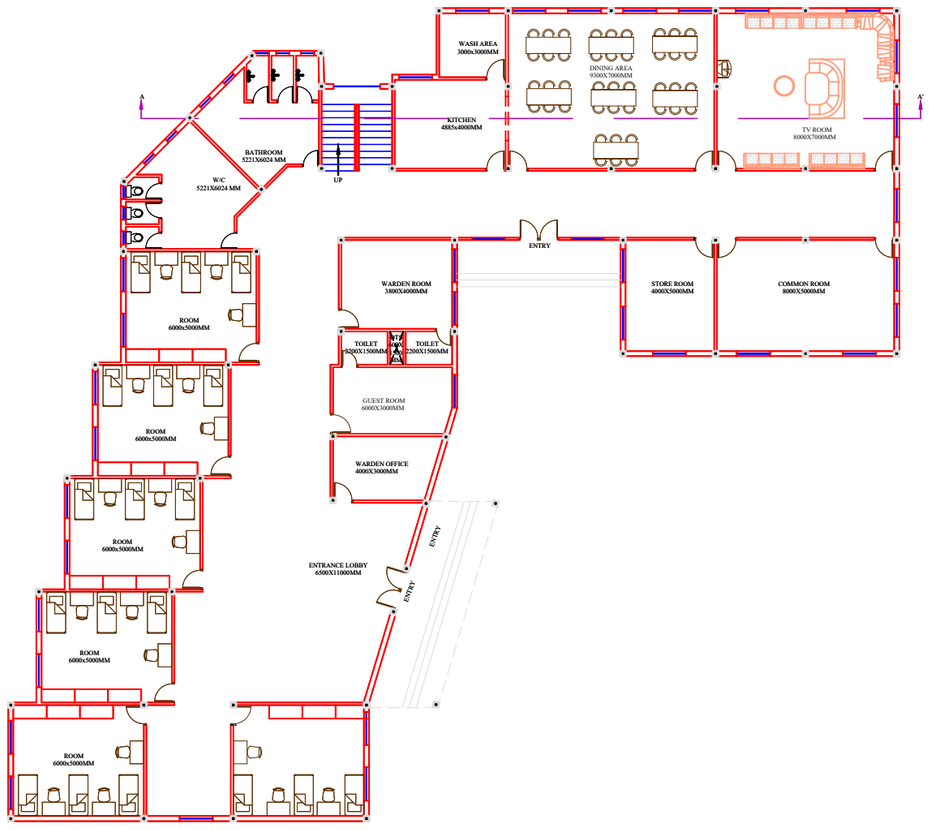


FIRST FLOOR PLAN

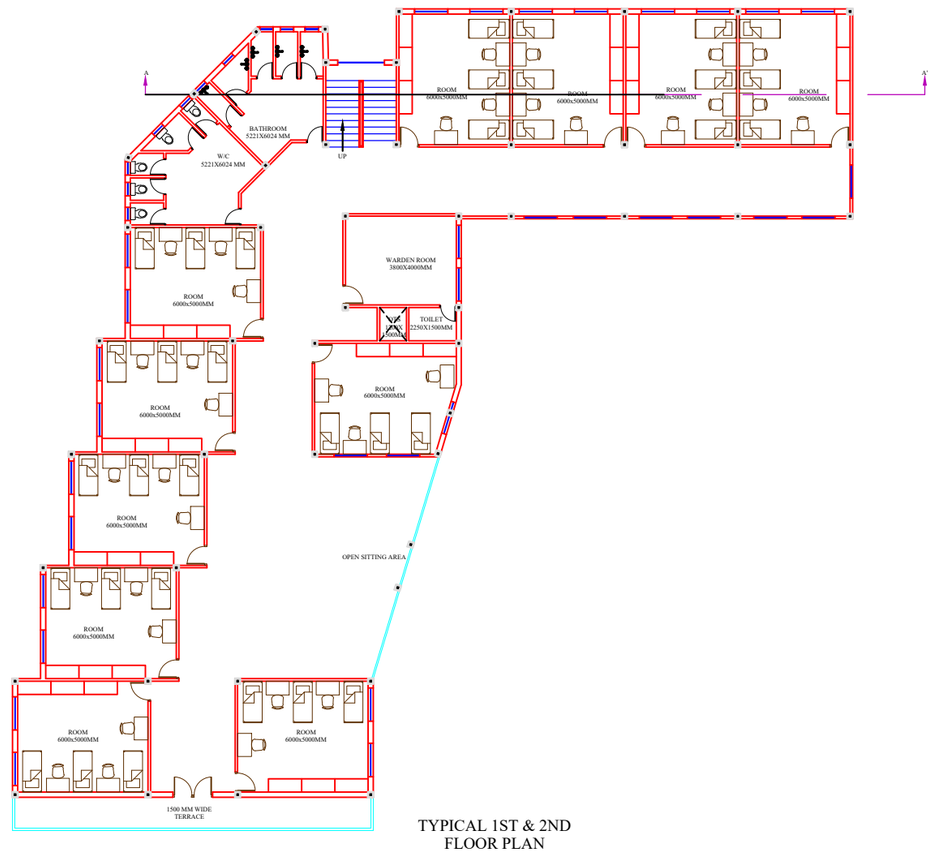


SECOND FLOOR PLAN

Topic:- ADMINISTRATION & DISPLAY BLOCK	**BBDU, LUCKNOW** ANUPAMA VISHWAKARMA B.Arch Vth yr , Xth SEM 1150101018	**THESIS GUIDE:-** AR.ANSHU RASTOGI	**SHEET NUMBER:-**	N



GROUND FLOOR



TYPICAL 1ST & 2ND
FLOOR PLAN

Topic:-

FLOOR PLAN OF HOSTEL

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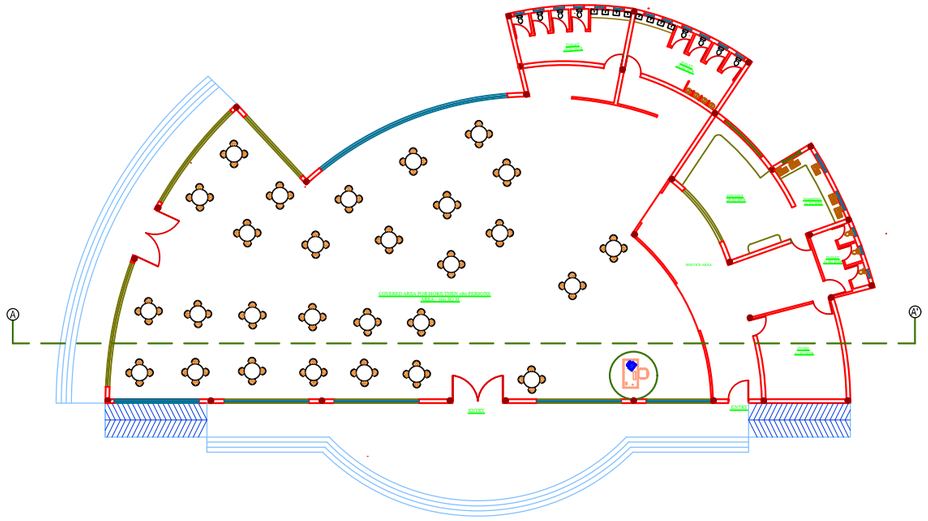
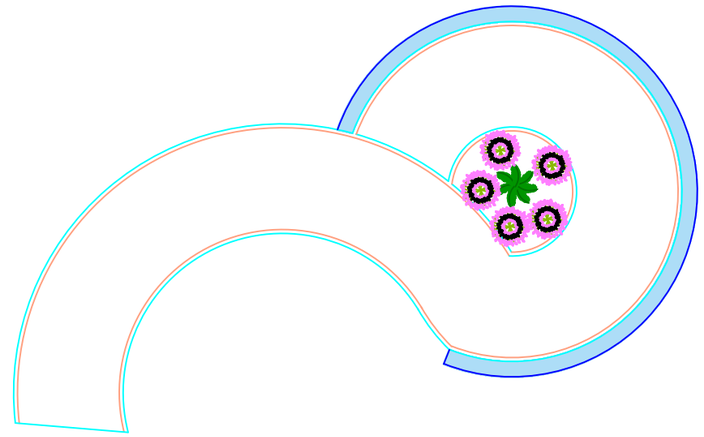
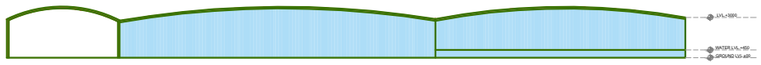


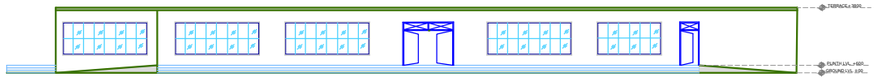
RESTAURENT PLAN



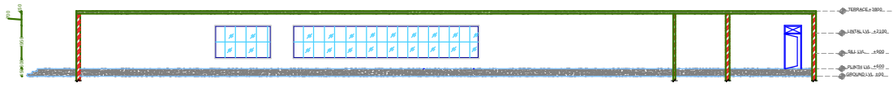
MEMORY LANE



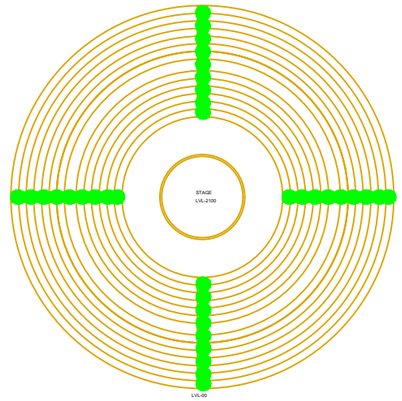
FRONT ELEVATION



FRONT ELEVATION



SECTION AT AA'



O.A.T. 400 SQ.M.

Topic:-

RESTAURANT ,O.A.T.,
MEMORY LANE PLAN

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