

ARCHITECTURE
portfolio
vikas varma
UNDERGRADUATE 2013-2018

'A team leader with excellent communication skills and academic qualification. possessing a proven ability to ensure projected architectural design and functional, safe and economical. excellent management skill to drive out any kind of situation without stress. and excellent ability to keep in touch with clients that the project designs match there need'

Personal Info

Name : Vikas Varma
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 umbergoan, valsad
 Gujarta-396170

Bachelor of Architecture

University : Amity University Rajasthan
 Institute : Amity School of Architecture
 And Planning
 Year : 2013-2018
 Language : English, Hindi
 Marwadi, Gujarati, Marathi
 Spanish (basic)



Studio Work Experience

- 2016** - Neighbourhood design
 - 3 BHK Appartment
 - 200 beded multi-speciality Hospital
- 2015** - Villa Design
 - Navodaya School
 - Commercial Complex
 - IGBC
- 2014** - Birla White School
 - Club House
- 2013** - Petrol Pump
 - Chattri Design

Proficiency Skill

- Autocad ●●●●●
- Setchup ●●●●○
- Photoshop ●●●○
- Revit ●●●○
- MS office ●●●●●
- V-Ray ●●●●○

Personal Skill

- Creative ●●●●●
- Leading ●●●●○
- TeamWork ●●●●○

Achivements

- UNIT DESSIGNEE at NASA INDIA 2014-15
- UNIT SECRETARY at NASA INDIA 2014-16
- MANAGEMENT CORDINATOR at LBC 2015
- CORDINATOR of COA MEETING 2015
- ORGANISING SECRETARY at Arch-o-lunio 2015

Workshop Attended

- LBC workshop 2015
- model making workshop
- bamboo workshop NASA 2016
- wooden workshop





Passion & Hobbies



'I BELIVE ARCHITECTURE SHOULD NOT BE EXPERIENCED THROUGH WORDS.. IT SHOULD BE FELT. WHAT I AM TRYING TO SAY IS IF MY DESIGN MAKES YOU FEEL SOMETHINY, I HAVE DONE SOME THING RIGHT'

Curriculum Vitae

CONTENT

RESIDENTIAL VILLA	01	
3BHK APPARMENT	04	
HOSPITAL	08	
NEIGHBOURHOOD DESIGN	11	

RESIDENTIAL VILLA

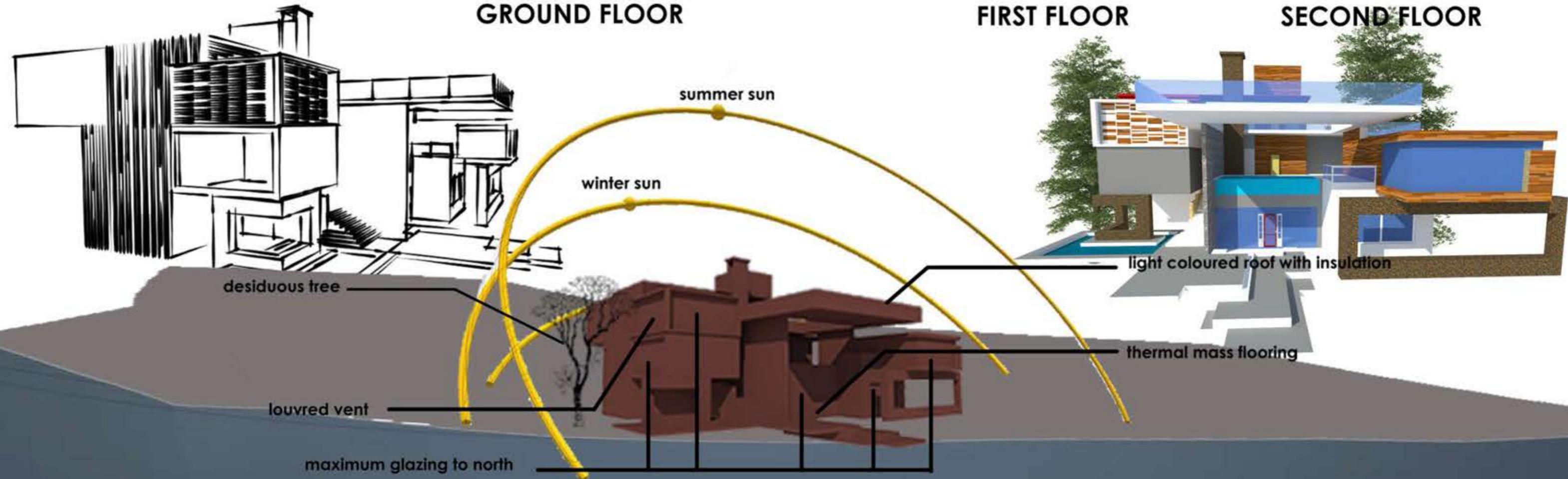
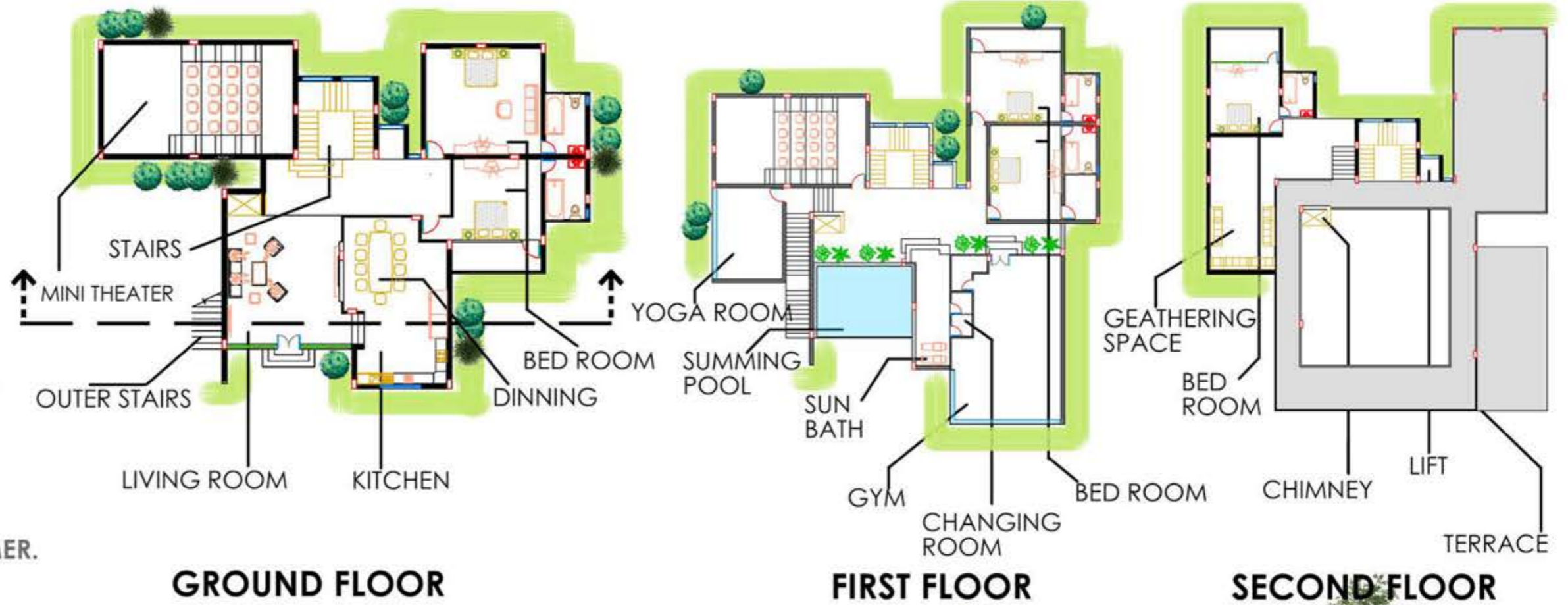


RESIDENTIAL VILLA

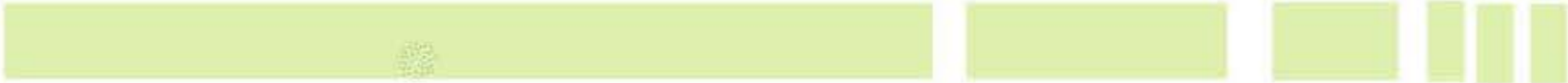
THE BRIEF WAS TO DESIGN A LUXURY VILLA FOR A FAMILY WITH ALL THE MODERN AMENITIES WHERE THEY CAN SPEND THEIR TIME WITH FAMILY AND FRIENDS.

LOCATION : DHARAMSALA, H.P
DHARAMSALA IS LOCATED IN HILLY TERRAIN OF HIMACHAL PRADESH.

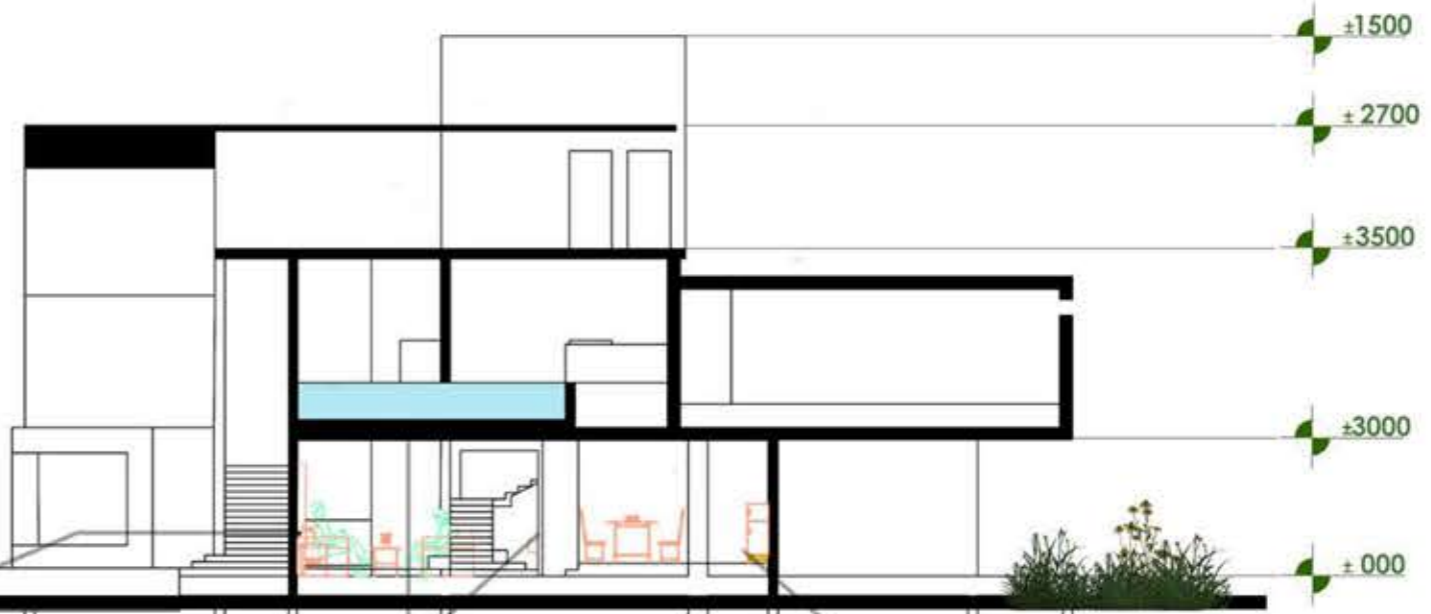
WEATHER:THE CLIMATE IS VERY COLD DURING WINTERS AND EVEN HOT AND HUMID IN SUMMER.



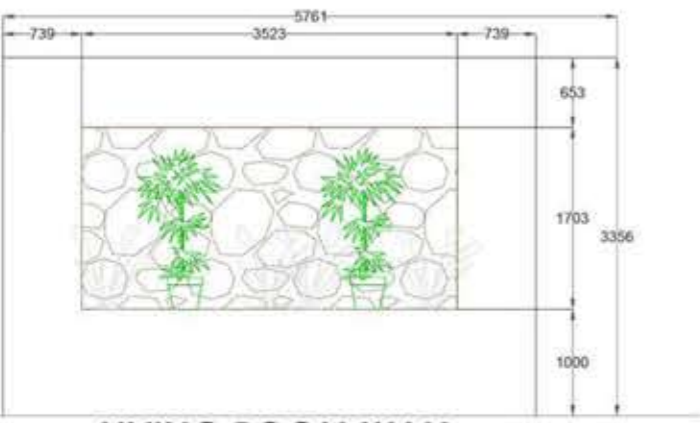
RESIDENTIAL VILLA



ELEVATION



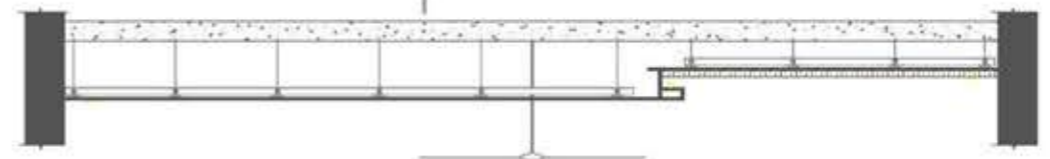
SECTION



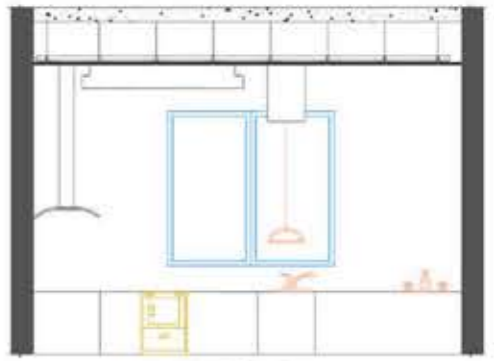
LIVING ROOM WALL



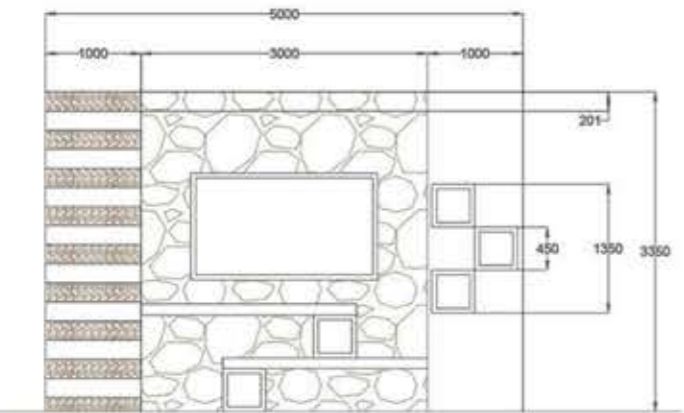
3D WALL LIVING ROOM



SECTION OF FALL CELLING LIVING ROOM



KITCHEN



LIVING T.V UNIT



3D T.V UNIT LIVING ROOM



3D CELLING LIVING ROOM



KITCHEN CELLING



3 B H K A P P A R T M E N T



3 BHK APARTMENT

INTRODUCTION

This residential apartment consist of two residential towers, 10 floors high respectively, characterized by the presence of dense vegetation along their outer envelopes.

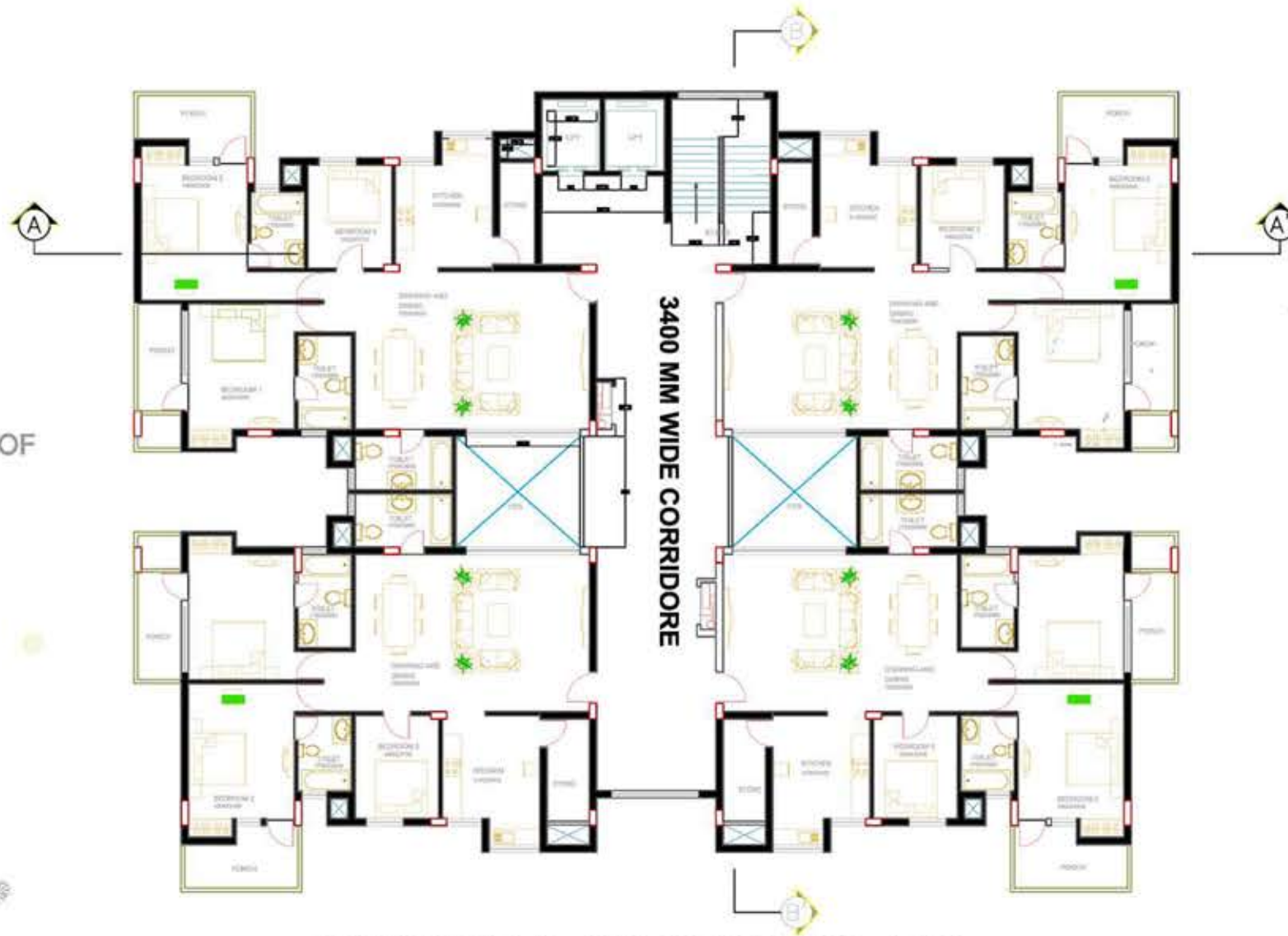
LOCATION:

LABANA IS LOCATED ON BOTH SIDE OF N.H. 11-C AT A DIATANCE OF 36 K.M NORTH OF JAIPUR

CLIMATE

LABANA IS LOCATED IN THE SEMI-ARID REGION OF RAJASHTHAN AND HENCE IT IS EXTREMELY HOT IN SUMMER AND SEVERE COLD IN WINTER

MEAN MAX. TEMP. : 45
MEAN MIN. TEMP. : 05



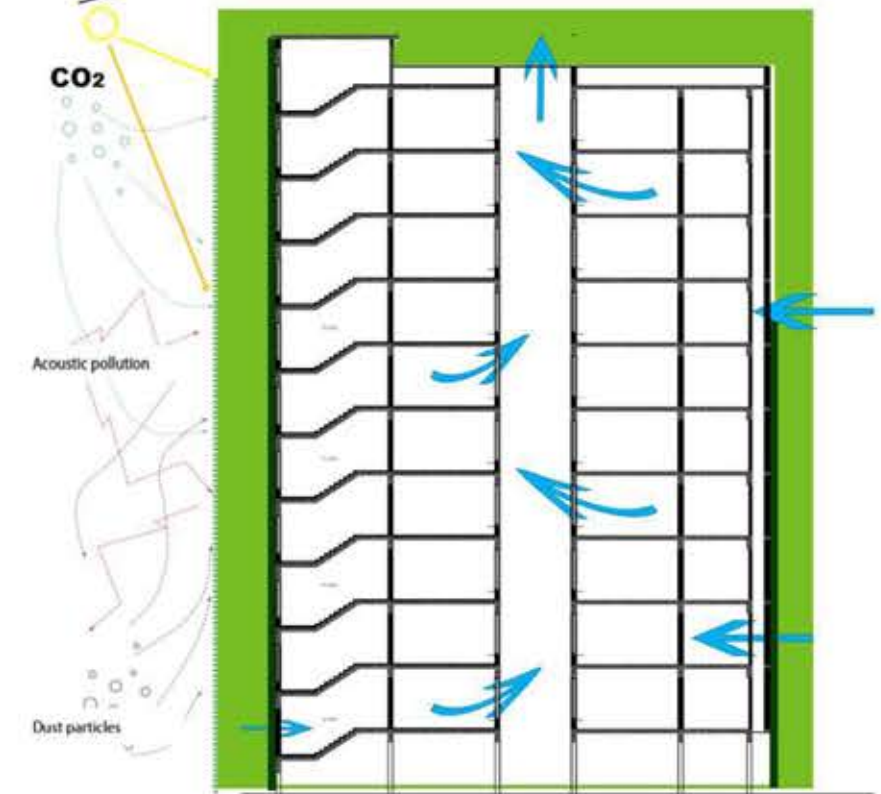
TYPICAL FLOOR PLAN



STILT FLOOR



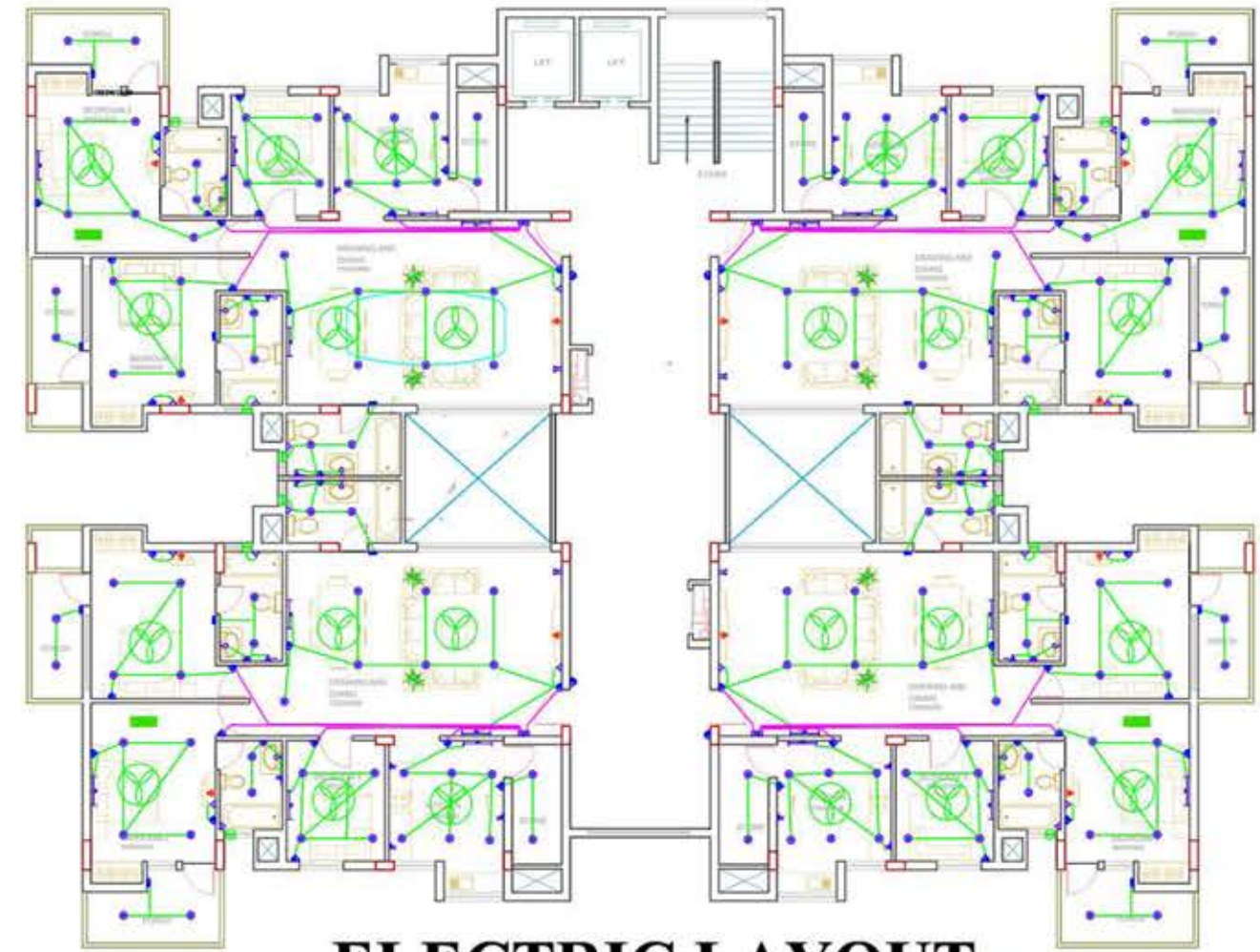
The stack effect describes the passive movement of air through a building resulting from differences in vertical pressure developed by thermal buoyancy. ... Stack ventilation takes advantage of this effect by constructing openings in the building envelope high at a substantial height, allowing the warm air to escape



3 BHK APARTMENT



ELEVATION A



LEGEND	
1	SWITCH
2	PLUG POINT
3	OUTLET
4	CONDUIT
5	WIRE
6	WIRE TRAY
7	WIRE MESH
8	WIRE TRAY COVER
9	WIRE TRAY BRACKET
10	WIRE TRAY CLIP
11	WIRE TRAY HOOK
12	WIRE TRAY RING
13	WIRE TRAY SPLITTER
14	WIRE TRAY TEE
15	WIRE TRAY CROSS
16	WIRE TRAY ELBOW
17	WIRE TRAY END
18	WIRE TRAY JUNCTION
19	WIRE TRAY TEE
20	WIRE TRAY CROSS
21	WIRE TRAY ELBOW
22	WIRE TRAY END
23	WIRE TRAY JUNCTION
24	WIRE TRAY TEE
25	WIRE TRAY CROSS
26	WIRE TRAY ELBOW
27	WIRE TRAY END
28	WIRE TRAY JUNCTION
29	WIRE TRAY TEE
30	WIRE TRAY CROSS
31	WIRE TRAY ELBOW
32	WIRE TRAY END
33	WIRE TRAY JUNCTION
34	WIRE TRAY TEE
35	WIRE TRAY CROSS
36	WIRE TRAY ELBOW
37	WIRE TRAY END
38	WIRE TRAY JUNCTION
39	WIRE TRAY TEE
40	WIRE TRAY CROSS
41	WIRE TRAY ELBOW
42	WIRE TRAY END
43	WIRE TRAY JUNCTION
44	WIRE TRAY TEE
45	WIRE TRAY CROSS
46	WIRE TRAY ELBOW
47	WIRE TRAY END
48	WIRE TRAY JUNCTION
49	WIRE TRAY TEE
50	WIRE TRAY CROSS
51	WIRE TRAY ELBOW
52	WIRE TRAY END
53	WIRE TRAY JUNCTION
54	WIRE TRAY TEE
55	WIRE TRAY CROSS
56	WIRE TRAY ELBOW
57	WIRE TRAY END
58	WIRE TRAY JUNCTION
59	WIRE TRAY TEE
60	WIRE TRAY CROSS
61	WIRE TRAY ELBOW
62	WIRE TRAY END
63	WIRE TRAY JUNCTION
64	WIRE TRAY TEE
65	WIRE TRAY CROSS
66	WIRE TRAY ELBOW
67	WIRE TRAY END
68	WIRE TRAY JUNCTION
69	WIRE TRAY TEE
70	WIRE TRAY CROSS
71	WIRE TRAY ELBOW
72	WIRE TRAY END
73	WIRE TRAY JUNCTION
74	WIRE TRAY TEE
75	WIRE TRAY CROSS
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85	WIRE TRAY CROSS
86	WIRE TRAY ELBOW
87	WIRE TRAY END
88	WIRE TRAY JUNCTION
89	WIRE TRAY TEE
90	WIRE TRAY CROSS
91	WIRE TRAY ELBOW
92	WIRE TRAY END
93	WIRE TRAY JUNCTION
94	WIRE TRAY TEE
95	WIRE TRAY CROSS
96	WIRE TRAY ELBOW
97	WIRE TRAY END
98	WIRE TRAY JUNCTION
99	WIRE TRAY TEE
100	WIRE TRAY CROSS

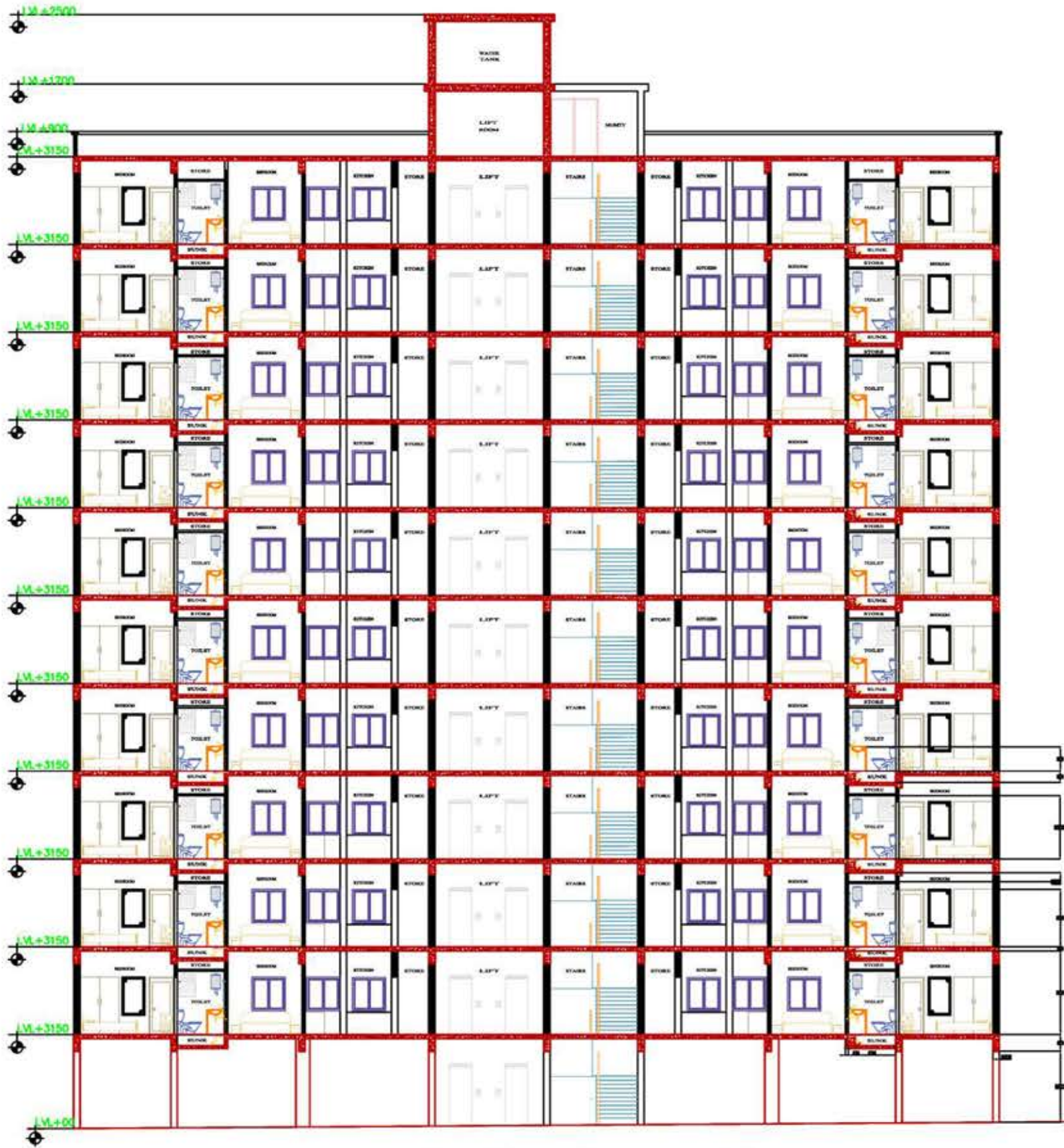
ELECTRIC LAYOUT



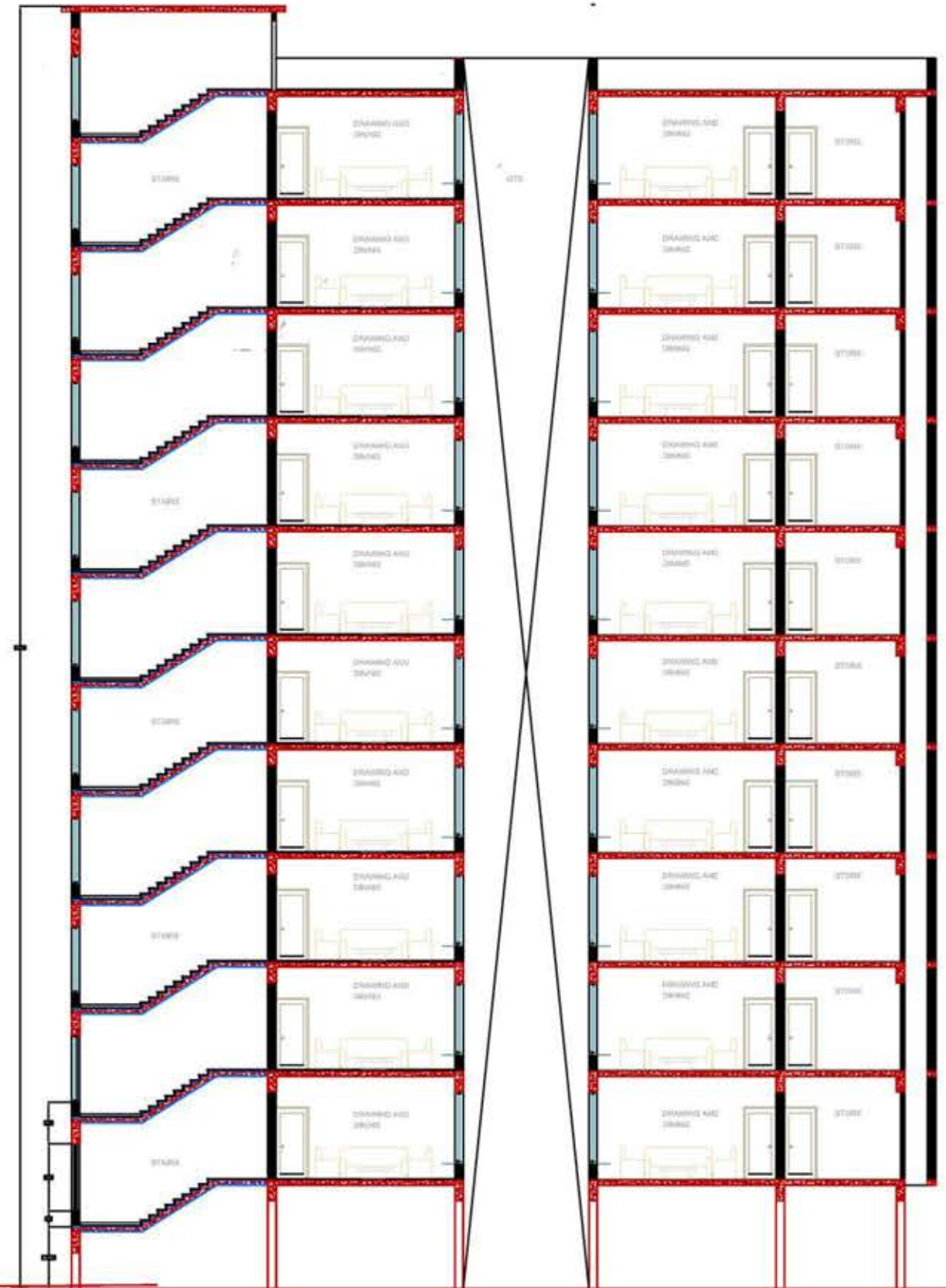
ELEVATION B



3 BHK APARTMENT



SECTION A-A'



SECTION B-B'

200 BEDED HOSPITAL

INTRODUCTION

- Design Specific Functional Area
- Inter – relation between various areas
- Preparation of drawings and models
- Electricity and Air Conditioning
- Lifts, Fire Fighting
- Water Supply
- Finalization after discussion with planning team

LOCATION:

NIMS IS LOCATED ON N.H. 11-C AT A DIATANCE OF 43.K.M FROM NORTH OF JAIPUR

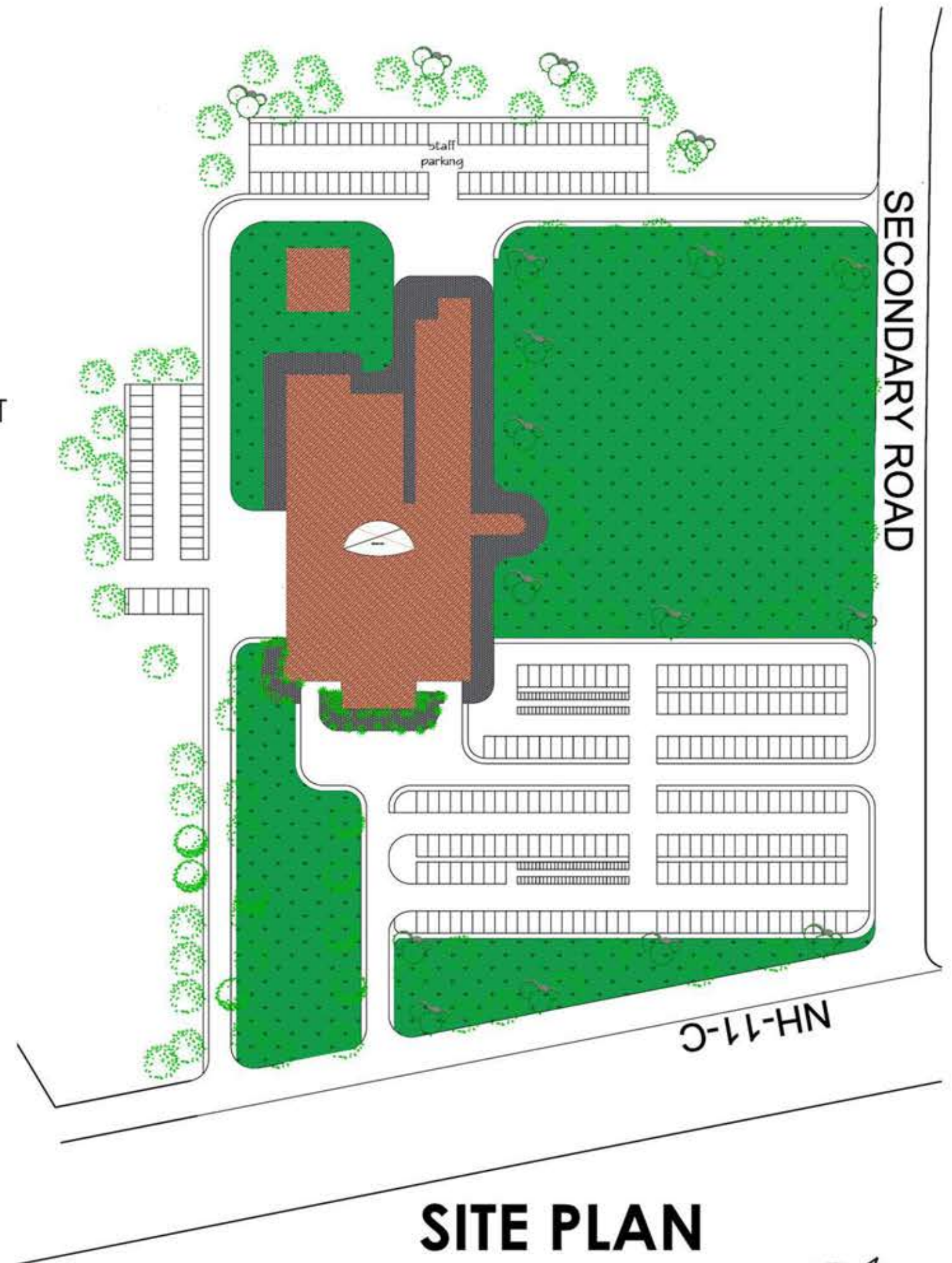
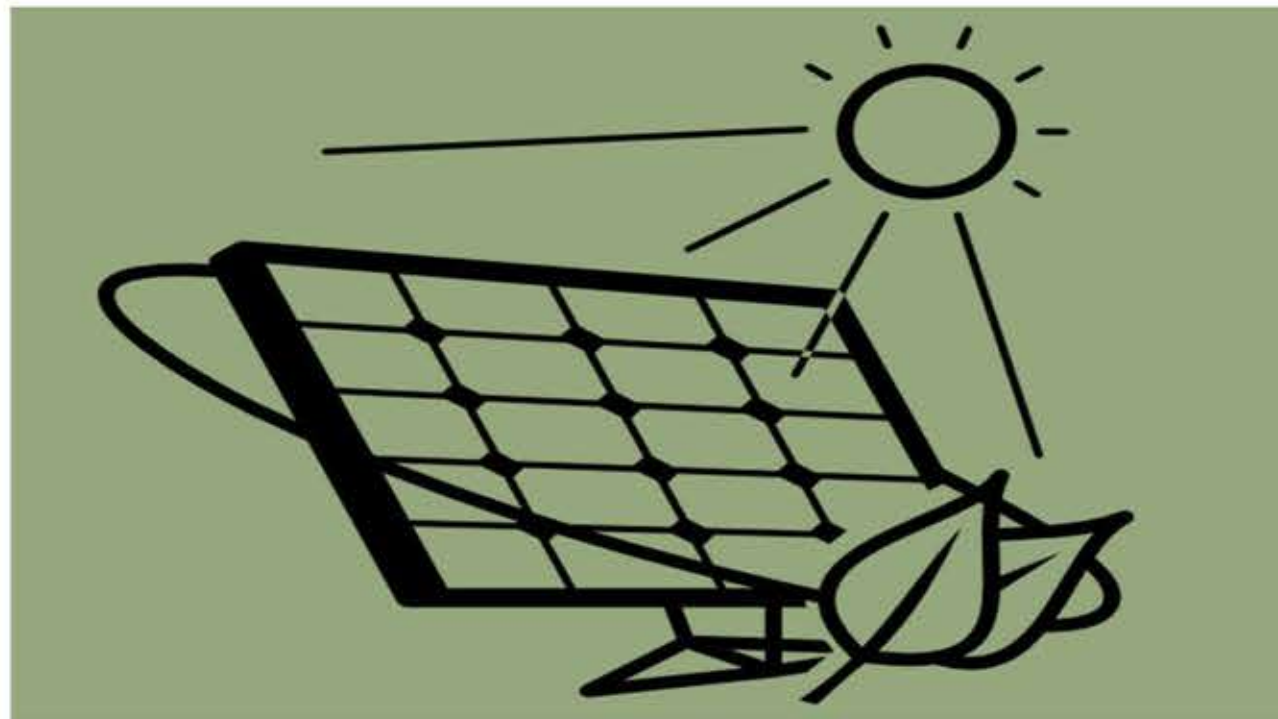
CLIMATE

NIMS IS LOCATED IN THE SEMI-ARID REGION OF RAJAS-THAN AND HENCE IT IS EXTREMELY HOT IN SUMMER AND SEVERE COLD IN WINTER

MEAN MAX. TEMP. : 45

MEAN MIN. TEMP. : 05

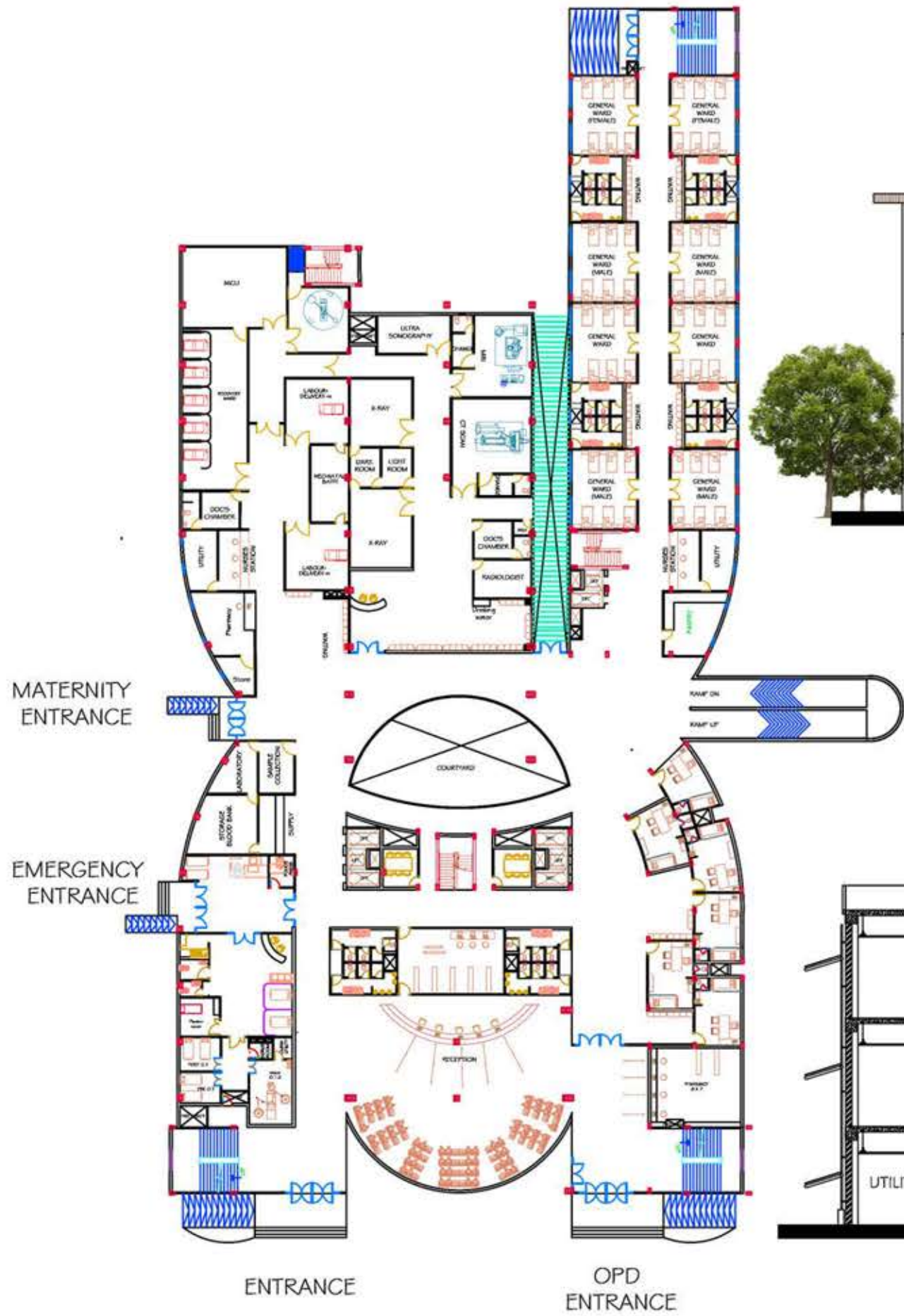
THE REASON AFTER DIRECTION THE FORM OF THE HOSPITAL TO THE ARCHITECTURAL TENDENCY OF HIGH-TECH, IS THAT: THE LATEST AND HIGEST TECHNOLOGIES ARE ALWAYS USED IN HOSPITAL AS METHODS OF TREATMENT TO HEAL OUT PATIENTS. ALSO USED PV SOLAR PANELS TO EMPOWER THE USE OF HIGH TECHNOLOGY AND ALSO ADD A SUSTAINABLE TOUCH TOWARDS A GREEN BUILDING THAT CONSUME LESS ELECTRICITY POWER.



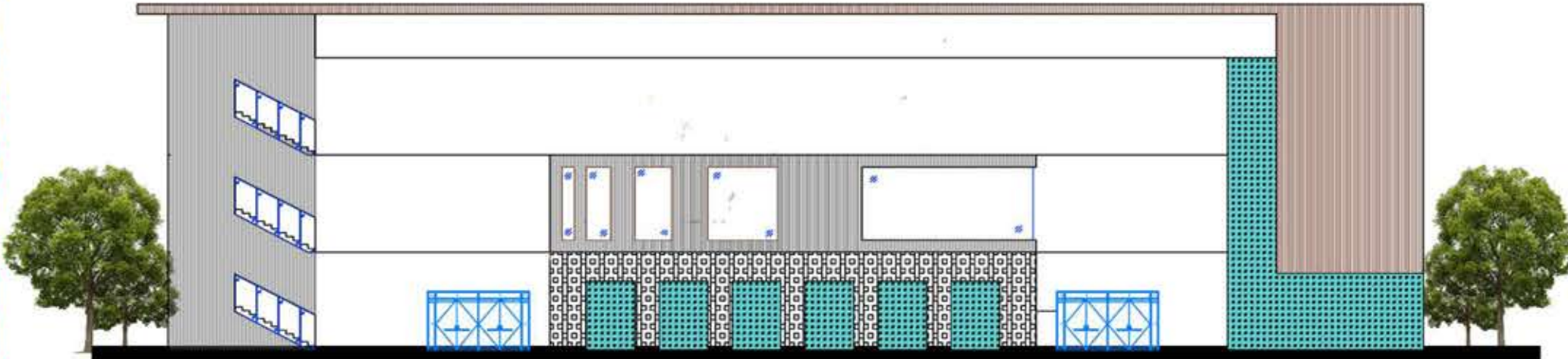
SITE PLAN



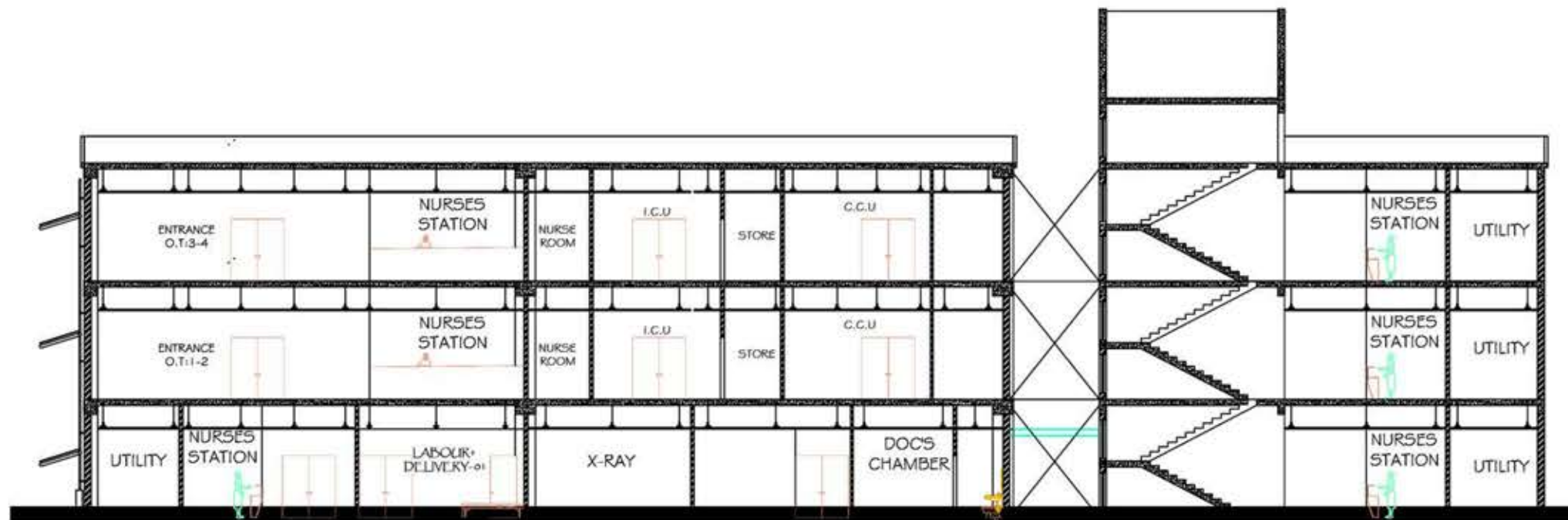
200 BEDED HOSPITAL



ENTRANCE OPD ENTRANCE
GROUND FLOOR

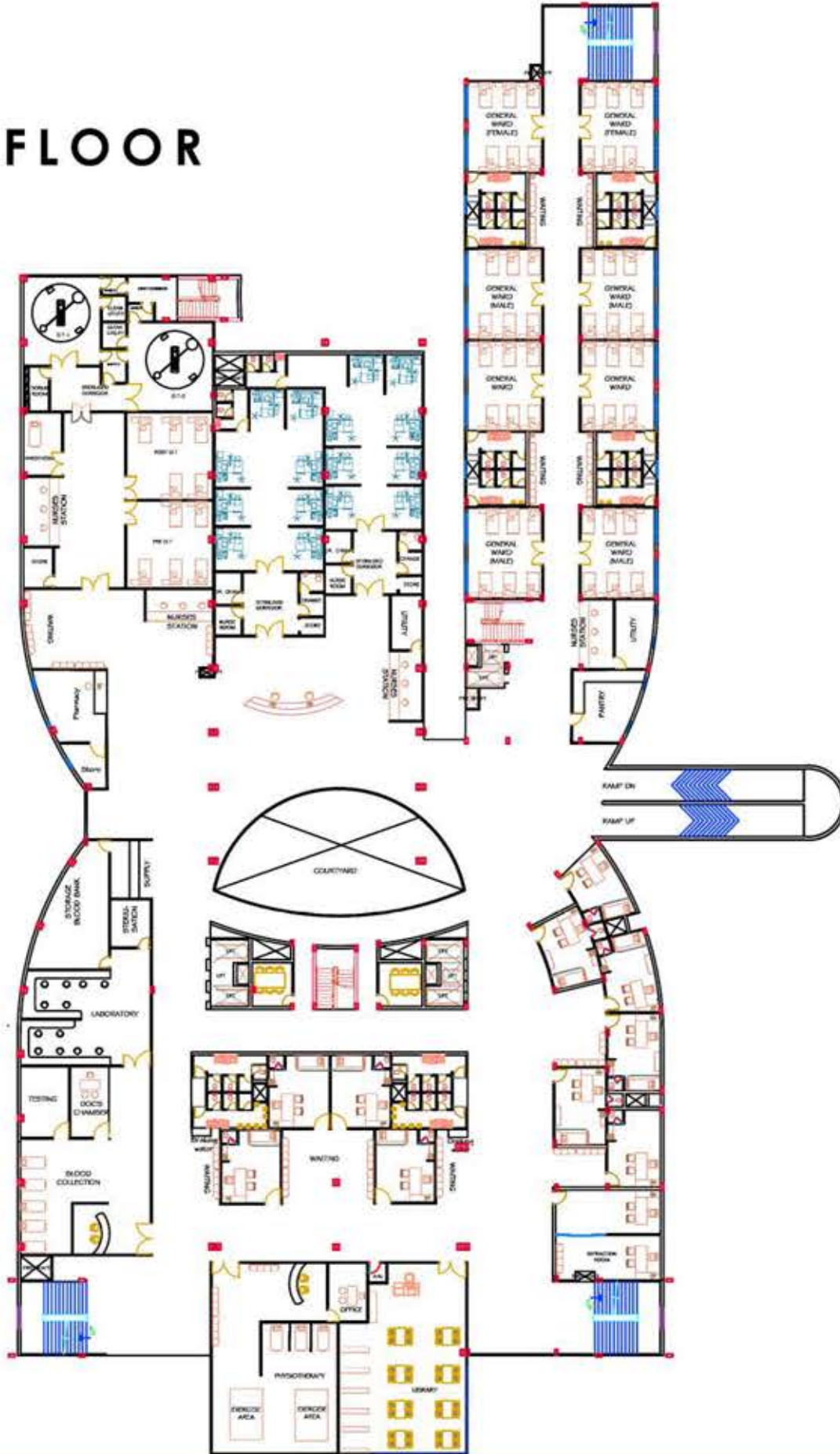


ELEVATION

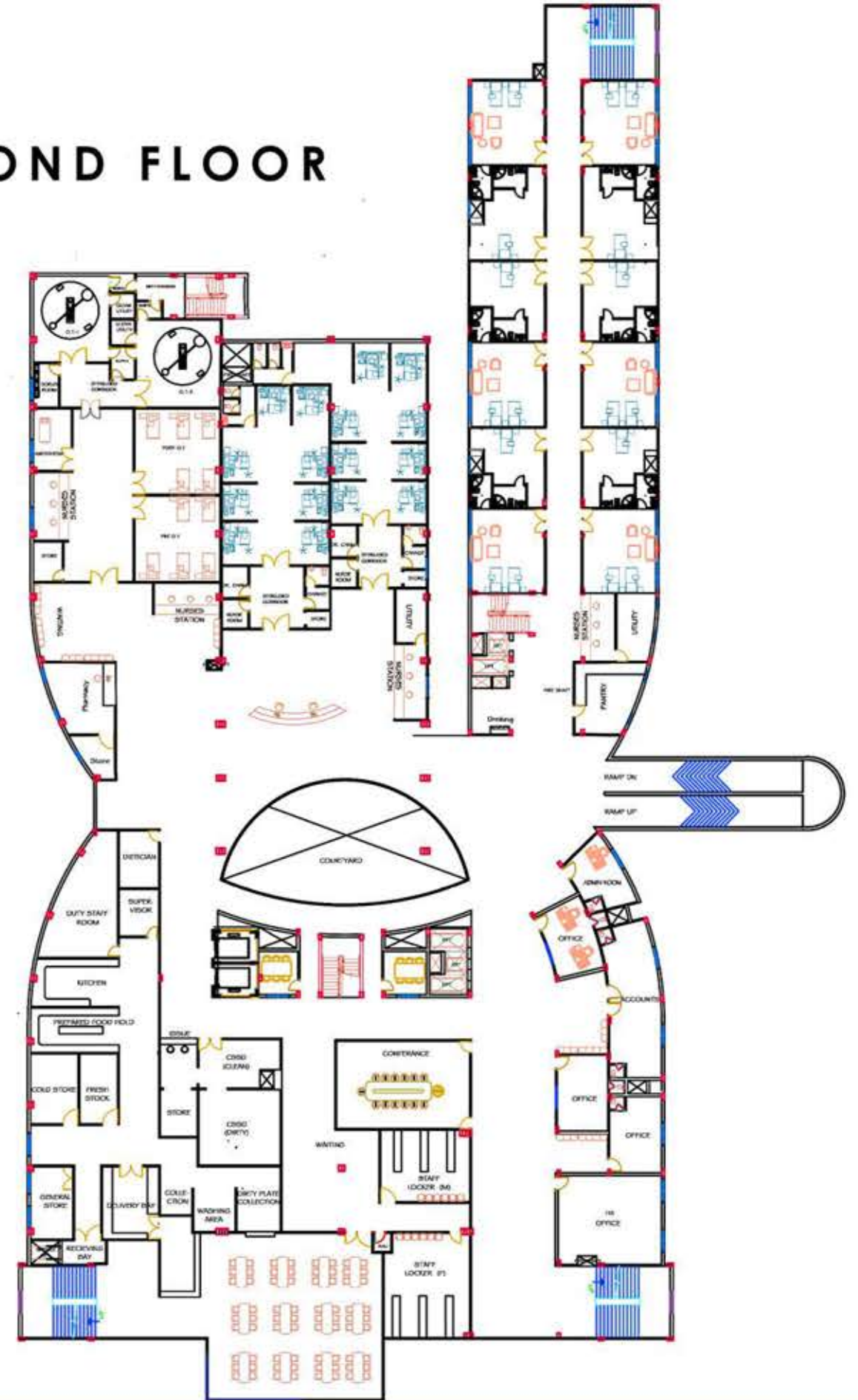


SECTION

FIRST FLOOR



SECOND FLOOR



SITE ANALYSIS

LOCATION: LABANA

LABANA IS LOCATED ON BOTH SIDE OF N.H. 11-C AT A DIATNCE OF 36 K.M NORTH OF JAIPUR

ELEVATION/ALTITUDE: 441 METERS ABOVE SEA LVL.

DISTANCE FROM MAIN POINT:

AIRPORT: 42.7 KM
RAILWAY STATION: 40.01 K.M
SINDHI CHAMP: 40 K.M

CLIMATE:

LABANA IS LOCATED IN THE SEMI-ARID REGION OF RAJASTHAN AND HENCE IT IS EXTREMELY HOT IN SUMMER AND SEVERE COLD IN WINTER

MEAN MAX. TEMP. : 45
MEAN MIN. TEMP. : 05

RAINFALL:

ANNUAL MEAN RAINFALL -673.9 MM
DUE TO LESS RAINFALL IN THIS REGION THE HOUSES ROOF ARE FLAT.

THE HEALTH CARE CENTER IS ASSESSABLE WITHIN WALKING DISTANCE.

MOST OF THE HOUSES WERE MADE FROM STONE WHICH ARE LOCALLY AVAILABLE IN ABUNDANT.

THERE IS PRIMARY SECTION SCHOOL IN LABANA.

THE MAIN SOURCE OF WATER IS BORE WELL

LABANA DATA:

Particulars	Total	Male	Female
Total No. of Houses	2,421	-	-
Population	15,077	7,861	7,216
Child (0-6)	2,434	1,304	1,130
Schedule Caste	3,574	1,849	1,725
Schedule Tribe	1,362	736	626
Literacy	68.36 %	83.04 %	52.12 %
Total Workers	5,106	3,493	1,613
Main Worker	4,409	0	0
Marginal Worker	697	357	340

CASTE FACTOR

Schedule Caste (SC) constitutes 23.70% while Schedule Tribe (ST) were 9.03 % of total population in Achrol village.

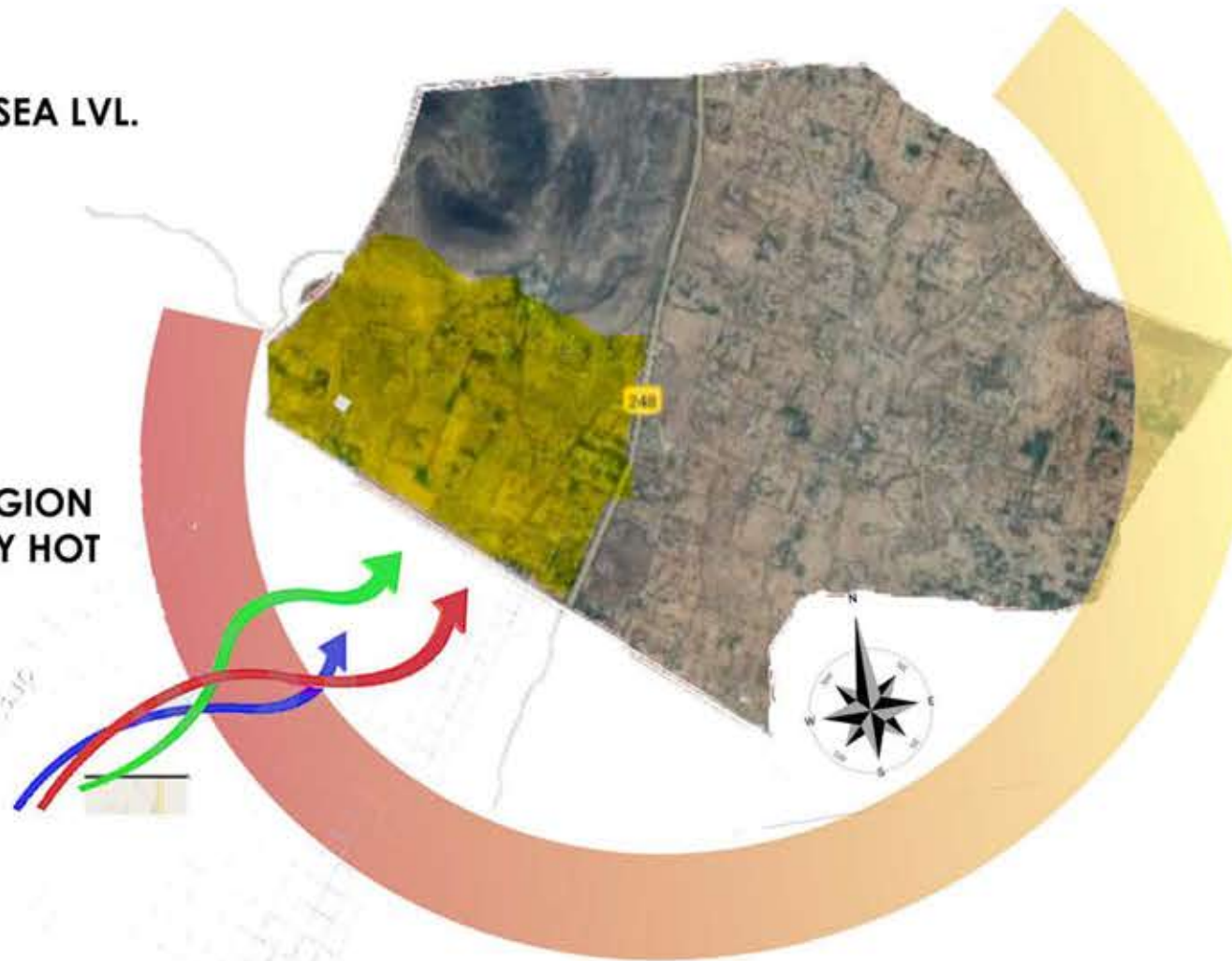
SOURCE: <http://www.census2011.co.in/data/village/80387-ochrol-rajasthan.html>

SOIL

LABANA IS SITUATED ON ROCKY AND YELLOWISH SOIL. THE VARIOUS KINDS OF SOIL FOUND HERE ARE SANDY SALINE, ALKALINE AND CHALKY.

EARTHQUACK:

MAGNITUDE LIES BETWEEN 3.0-3.9 ON VECTOR SCALE.



HEALTH CARE CENTER:

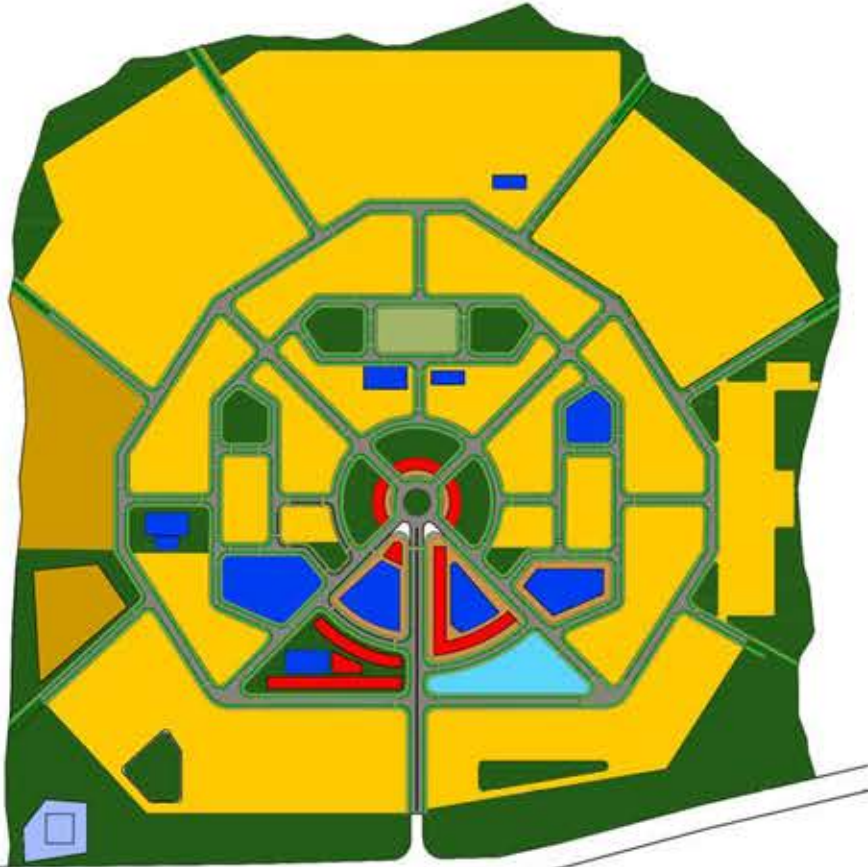
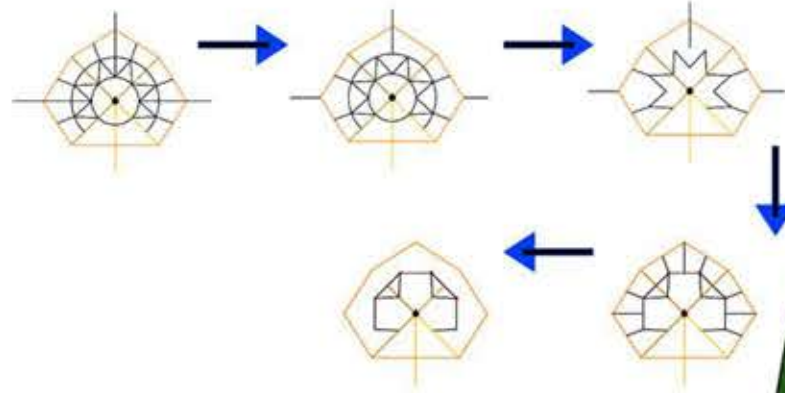


NEIGHBOURHOOD DESIGN

INTRODUCTION

THE BRIEF WAS TO DESIGN A NEIGHBOURHOOD UNIT WITH DWELLING OF 1500 HOUSE UNIT.

FORM DEVELOPMENT



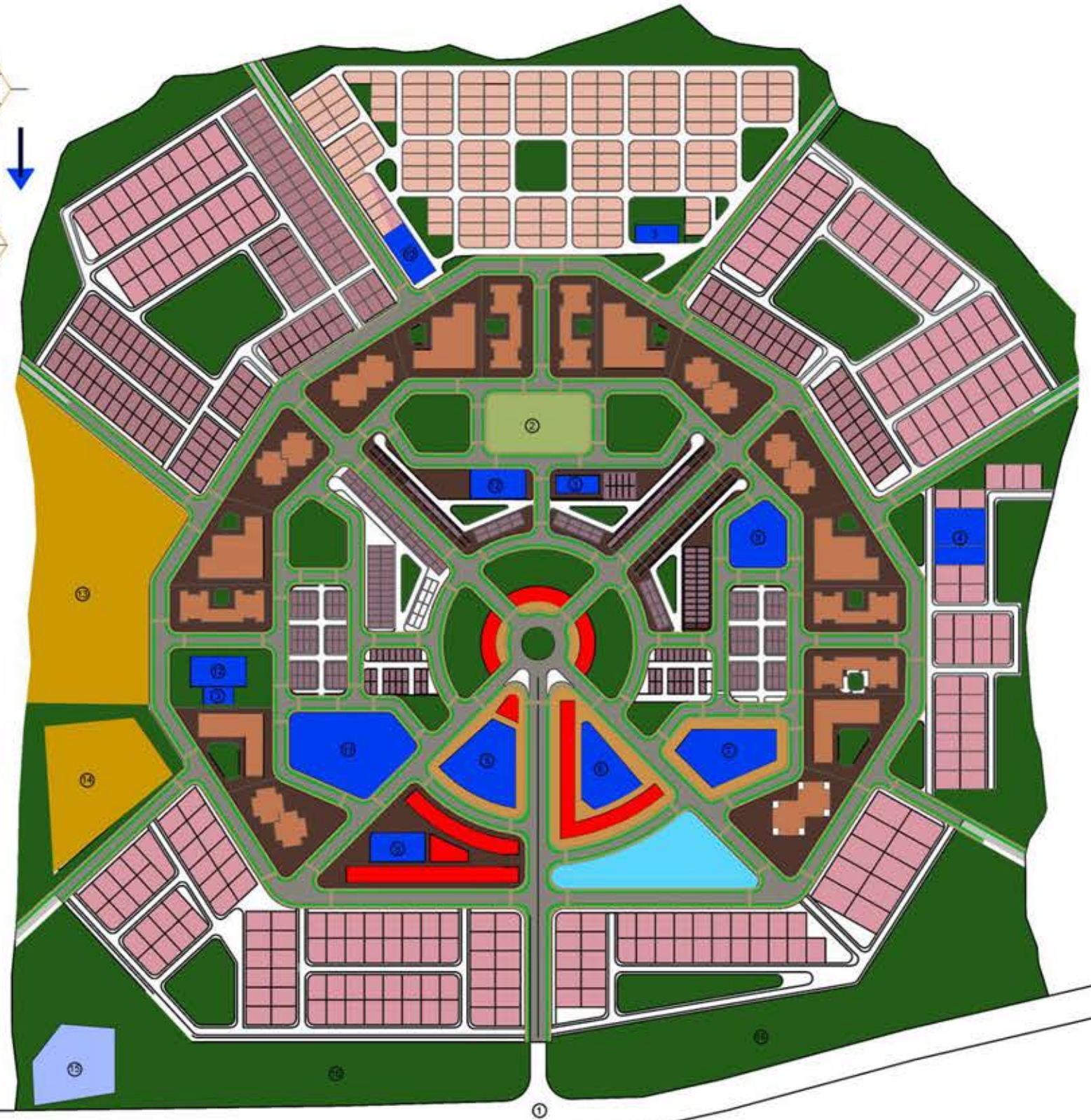
LAND USE

LAND USE			
RESIDENTIAL	PERCENTAGE	ACHIEVED	AREAS (Sq M)
Residential	55%	55%	336,730.2
Commercial	5%	5%	25,413.6
Recreational	20%	20%	120,714.6
Other	20%	20%	120,714.6

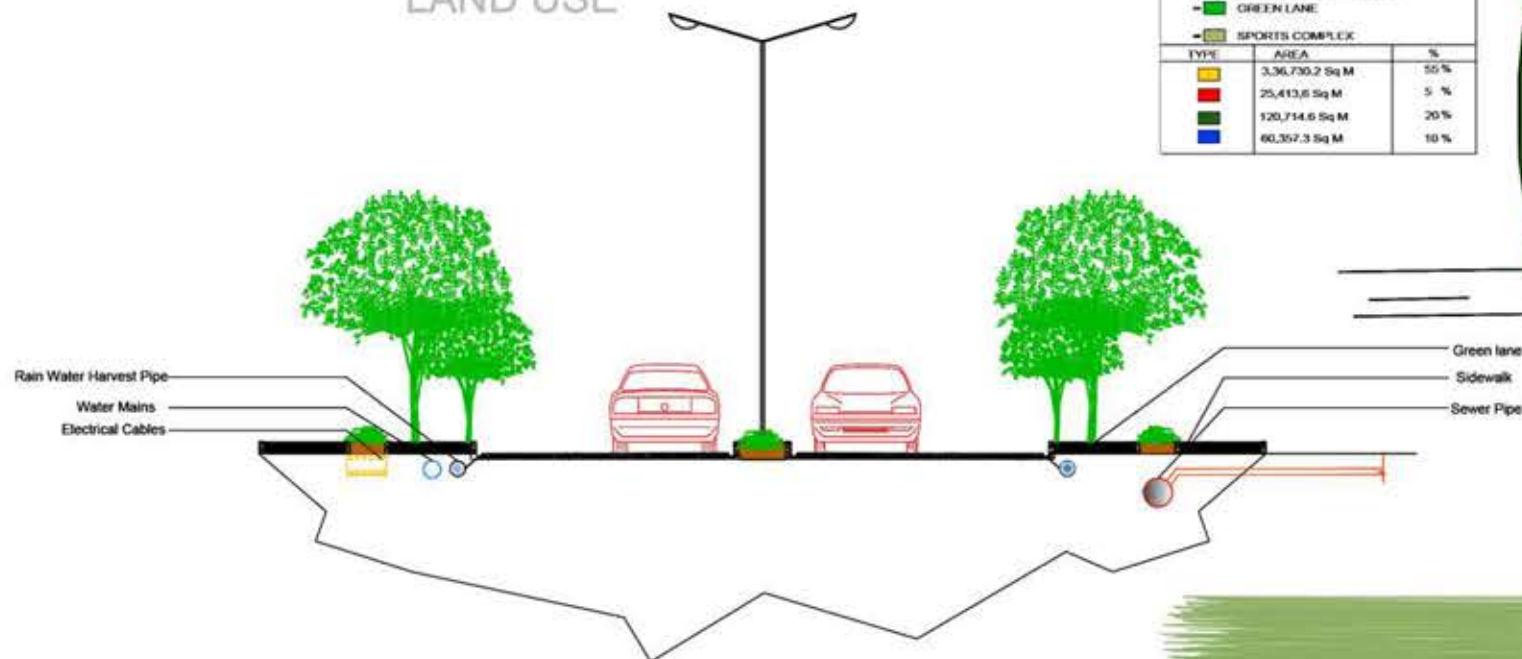
RESIDENTIAL DETAILS			
NO.	UNIT TYPE	NO. OF UNITS	AREA (Sq M)
1	1 BHK	1500	1500
2	2 BHK	1500	1500
3	3 BHK	1500	1500
4	4 BHK	1500	1500
5	5 BHK	1500	1500
6	6 BHK	1500	1500
7	7 BHK	1500	1500
8	8 BHK	1500	1500
9	9 BHK	1500	1500
10	10 BHK	1500	1500
11	11 BHK	1500	1500
12	12 BHK	1500	1500
13	13 BHK	1500	1500
14	14 BHK	1500	1500
15	15 BHK	1500	1500
16	16 BHK	1500	1500
17	17 BHK	1500	1500
18	18 BHK	1500	1500
19	19 BHK	1500	1500
20	20 BHK	1500	1500

APARTMENTS			
S. NO.	PARTICULARS	AREA (Sq M)	%
1	SPORTS COMPLEX	15000	5%
2	Kindergarten	500	0.2%
3	Club	1500	0.5%
4	Healthcare Center	2500	0.8%
5	Multi-purpose Community Hall	2000	0.7%
6	Secondary School	3000	1%
7	Auditorium	1500	0.5%
8	Multiple	2000	0.7%
9	Bank and ATM	1000	0.3%
10	Recreational Space and Commercial Complex	8000	2.7%
11	Primary School	1000	0.3%
12	Utility Area/Star Panels & CSP Field	20000	6.8%
13	11 KV Sub station	500	0.2%
14	STP	750	0.3%
15	Forest Area	14288	4.8%

LEGENDS		
TYPE	AREA	%
RESIDENTIAL	3,36,730.2 Sq M	55%
COMMERCIAL	25,413.6 Sq M	5%
RECREATIONAL	120,714.6 Sq M	20%
SEMI PUBLIC	60,357.3 Sq M	10%



MASTER PLAN



NEIGHBOURHOOD DESIGN

WATER SUPPLY



SEWER



LEGENDS

S. no	PARTICULAR	SYMBOL
I	WATER SUPPLY LINE	
II	WATER TANK	
III	SEWER MAIN LINE	
IV	SEWER SUB LINE	
V	ELECTRICAL MAIN LINE	
VI	ELECTRICAL SUB LINE	
VII	DRAINAGE MAIN LINE	
VIII	DRAINAGE SUB LINE	



CSP PLANT
 This township consists of 1500 homes. The power consumption in a township is on average 700-1000 KW-H/Month. This township consist of various sizes of Homes so on average if we take power consumption of one home being 850KW-H/Month. So, for 1500 homes it will be > 850*1500=1275000 KW-H/Month. Amount of captured solar energy depends critically on orientation of collector with respect to the angle of the Sun.

Under optimum conditions, one can achieve fluxes as high as 2000 Watts per sq. meter in the Winter, for a location at 40 degrees latitude, the sun is lower in the sky and the average flux received is about 300 Watts per sq. meter.

In the winter on a sunny day at this latitude (40°) the roof will receive about 6 hours of illumination.

So energy generated over this 6 hour period is:
 300 watts per square meter x 100 square meters x 6 hours
 180 KWH (per day) more than you need.

But remember the efficiency problem:
 5% efficiency - 9 KWH per day
 10% efficiency - 18 KWH per day
 20% efficiency - 36 KWH per day



ELECTRICAL & SOLAR POWER PLANT

DRAINAGE & RAIN WATER HARVESTING

COMMERCIAL COMPLEX



COMMERCIAL COMPLEX



CANTEEN



RESIDENTIAL BANGLOW



RESIDENTIAL BANGLOW



INTERIOR DESIGN



BRICK JALI WORK



THANK YOU