

SHOPPING MALL

A THESIS

Submitted in partial fulfillment of the requirements for the award of

Bachelor of Architecture degree

By

JONNALAGADDA RAJESH

(37210018)



**DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND ENVIRONMENT**

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY) Accredited

With Grade "A" by NAAC

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NOVEMBER 2021



DEPARTMENT OF ARCHITECTURE

BONAFIDE CERTIFICATE

This is to certify that this Thesis Report is the bonafide work of JONNALAGADDA RAJESH (37210018) who carried out the Thesis entitled "Shopping mall with multiplex" under our supervision from July 2021 to November 2021.

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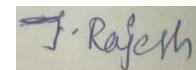
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DECLARATION

I, **JONNALAGADDA RAJESH** hereby declare that the Thesis Report entitled "**SHOPPING MALL**" done by me under the guidance of **Ar. VIGNAESHWAR.C** (Internal Guide), **AR.VIJENDRANATH.R** (Internal Review Member) and **Ar.SARATH CHANDRA KANTH** (External Guide) Sathyabama Institute of Science and Technology is submitted in partial fulfilment of the requirements for the award of Bachelor of Architecture Degree.

DATE:06/12/2021



PLACE: Chennai

SIGNATURE OF THECANDIDATE

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I wish to express my thanks to all Teaching and Non-teaching staff members of the **Department of Architecture** who were helpful in many ways for the completion of the Thesis.

JONNALAGADDA RAJESH

THESIS SYNOPSIS

To design a space for public for entertainment and commercial purpose with spacial requirements of multiplex and various tenants and in that location shopping mall having more demand because of less mall in very crowded commercial area and it is going to be integrating of various forms and volumes of good climate responsive and also some fluidity involves. To design to all kind of users without differences of rich and poor.Tenants are provided for fully commercial use of various types such as clothing,electronics,spa,toy shops etc. Multiplex is provided for entertainment purpose of public with various New movies etc. Play zone is provided for entertainment of public with various games provided such as bowling,vedio games,box cricket etc

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

A huge building or a group of buildings that houses a variety of stores. A big shopping centre with a variety of retailers, restaurants, and other businesses housed in a sequence of connected or neighbouring buildings or a single enormous building. A pedestrian-only shopping district in the city. A pedestrian-only shopping mall featuring stores and companies front a system of enclosed walkways. The primary purpose of a shopping mall is for people to go out of the house and do something enjoyable. Shopping malls can host social gatherings, entertainment, performances, product launches, promotions, and festivals, among other things. Shopping malls play a significant role in increasing the market value of metropolitan cities such as Hyderabad, Chennai, and Bangalore. In India, shopping malls are a relatively recent concept. These are the public spaces that are attracted by the facade. Shopping is the most common human activity, and practically everyone in a civilized society engages in it on a daily basis. As a result, public spaces that are used on a regular basis should be well-designed to meet the needs of the general public in a pleasant manner. At the very least, the elevation should provide peeks into the interior, revealing what is going on inside and piquing attention. As a result, it will be a fun social gathering spot.

Initially, businesses were regarded as need-based locations. When they needed something, they preferred to go there. Individual, massive, self-contained cinemas were also present. However, as the world's pace quickened, people found themselves with less time for commercial and recreational pursuits. As a result, the idea was made to combine these two activities into one, dubbed "Multiplex cum Shopping Mall." It was quickly a big success, and such structures were widely welcomed by the general population. Large, spacious, ornate auditoriums, which were the traditional cinema form for more than 50 years in India, are now largely obsolete due to the loss of profit in their operation.

1.2 NEED OF THE PROJECT

Because shopping malls are fully public gathering places, they require additional security and are subject to the changes and problems that come with living in such harsh climates. Because it is surrounded by commercial districts, the site location (Madhapur) necessitates the construction of a retail mall for decent shopping and entertainment. As the city's population grows, Hyderabad and Madhapur become more busy, with software workers and students, yet they must travel further for shopping.

1.3 AIM

- To investigate urban gathering areas and build a shopping mall that provides a better public experience and interaction by incorporating an informal natural elements.
- To design a shopping mall to every group of people which can comfortably buy by everyone.

1.4 OBJECTIVE

- To study the evolution, spatial organization and activities that occurring a shopping mall.
- To study the importance of congregation spaces and factors that affects its quality.
- To study and analyze the current (existing) scenarios. To select a suitable site and project for design of the mall.
- To design shopping mall integrating appropriate congregation spaces and activities.

1.4 METHODOLOGY:

- Understanding the project and background study
- Literature study
- Case study and analysis
- Framing requirement
- Design solutions

CHAPTER 2

LITERATURE STUDY

2.1 SPACES AND ACTIVITIES

Food court:

However, a food court, which is a collection of different restaurants, is one of the most popular features of a shopping mall. Visitors to a mall's food court can choose from a variety of restaurants, ranging from local franchises to worldwide chains. A conventional food court has venues that operate side by side, with no centralised communal dining area to accommodate clients.

Departmental store:

Signing major department stores was important for the financial viability of the projects, as well as to drive retail traffic that would result in visits to the smaller businesses in the mall, when Victor Gruen designed the shopping mall format in the mid 1950s. These larger stores are referred to as anchor stores or pull tenants, and they are typically situated as widely apart as possible in order to enhance traffic flow from one anchor to the next. A department store is a big retail establishment with a wide range of products and is divided into departments for the purposes of selling, display, and advertising, as well as customer service and control. Each department offers its own line of items and employs its own sales, accounting, packing, and security personnel.

Stand alone stores:

A shopping mall or shopping centre will frequently have satellite buildings, either on the same plot of land or adjacent to it, on which stand-alone stores will be housed, which may or may not be legally tied to the core facility by contract or ownership. These shops may have their own parking lots or be connected to those of the mall or shopping centre.

The developer of the mall may have planned for the stand-alone store to exist, or may have came up with the idea.



Fig no 2.1.1 Spaces and activities

Anchor store locations:

Victor Gruen defines anchor stores as "magnet stores" that draw people in. These stores should be strategically situated so that they do not obstruct each other's operations and provide maximum public exposure to the mall's other stand-alone stores.



2.2 urban study:

Hyderabad is the capital and largest city of Telangana, as well as the state capital of Andhra Pradesh, in India. It is located on the Deccan Plateau, along the banks of the Musi River, in the northern part of South India, and covers an area of 650 km² (250 sq mi). Much of Hyderabad is built on hilly terrain around manmade lakes, notably the Hussain Sagar lake, which predates the city's establishment and is located to the north of the city centre. Hyderabad is India's fourth-most populated city, with a population of 6.9 million persons within the city boundaries and 9.7 million residents in the metropolitan zone, making it the sixth-most populous metropolitan area in the country, according to the 2011 Census of India. Hyderabad is India's fifth-largest city economy, with a GDP of US\$74 billion. It was once ruled by muslims, mughals, and other rulers.

In 2018, the city had around 5.3 million automobiles, with 4.3 million being two-wheelers and 1.04 million being four-wheelers. Because 80 percent of passengers and 60 percent of freight are moved by road, the enormous number of cars combined with the city's low road coverage (roads account for only 9.5 percent of the entire area) has resulted in significant traffic congestion.

Madhapur, a peaceful town in the early 1990s, has grown into a sophisticated IT and BPO centre, putting Hyderabad on the map as the city with the highest concentration of IT companies. Madhapur was once known as Madhava Puram, according to locals. Lord Krishna's other name is Madhava, and Puram meaning village. Villagers used to worship Lord Krishna in the past, and as a result, the name Madhava Puram became popular. It is now known as Madhapur.

During the day, the peak hours are 9 a.m. and 7:30 p.m., when there is more traffic and a strong flow on the roadways. The presence of businesses and tourist attractions, for example, increases traffic flow in the neighbourhood.

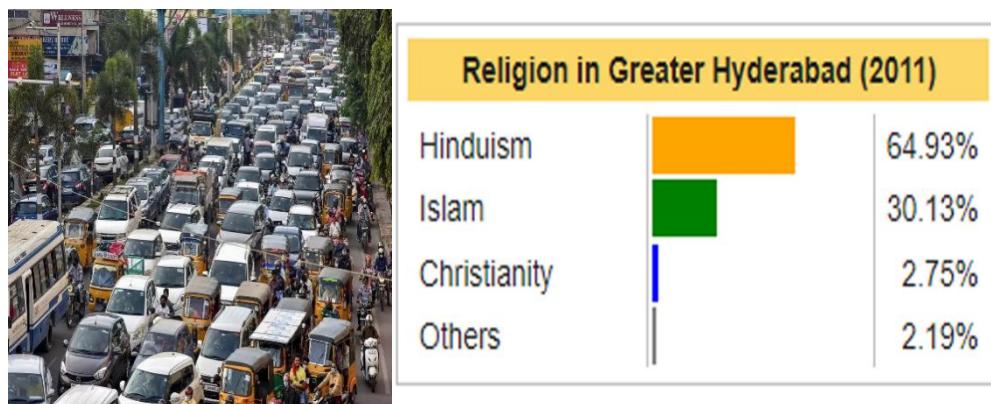


Fig 2.2.1 Traffic and religion details of hyderabad

CHAPTER 3

LITERATURE CASE STUDIES

3.1 SALT LAKE CITY CENTER MALL

Client	: Ambuja-neotia group
Type	: Mixed use commercial building
Year of completion	: 2004
Architect	: Charles correia
site area	: 6.5 acre
Climate	: Warm and humid
Topography	: Plain
Av. Footfalls Weekdays	: 18,000
Av. Footfalls Weekends	: 35,000
Structure	: Rcc frame work and clay brick partition
Catchment –Primary	: Salt Lake
Catchment –Secondary	: North Kolkata
4-wheeler parking capacity	: 370 (Covered) & 120 (Open)
2-wheeler parking capacity	: 250 Open
Location	: Salt lake city or bidhanagar in west bengal

The project's main concept is to appeal to people of all income groups, particularly locals, by emphasising important aspects of users' lifestyles, such as adda and kund, which can be used as a crowd-puller not only for shopping but also for sitting and relaxing, and it is designed for high-income people with luxury features such as entertainment, more national and international brands, and so on. Activities that are linked together provide not just functional but also aesthetic satisfaction. Market place in the traditional sense. Self-shading is created by orienting the constructed forms. Organizing clusters



Fig 3.1.1 Salt lake city center mall zoning

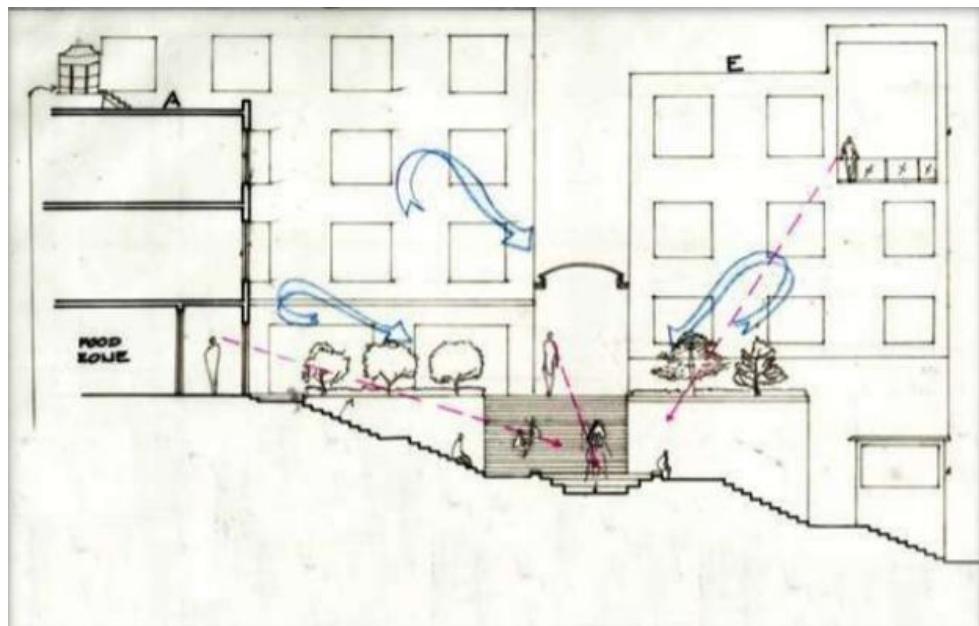


Fig 3.1.2 salt lake mall section

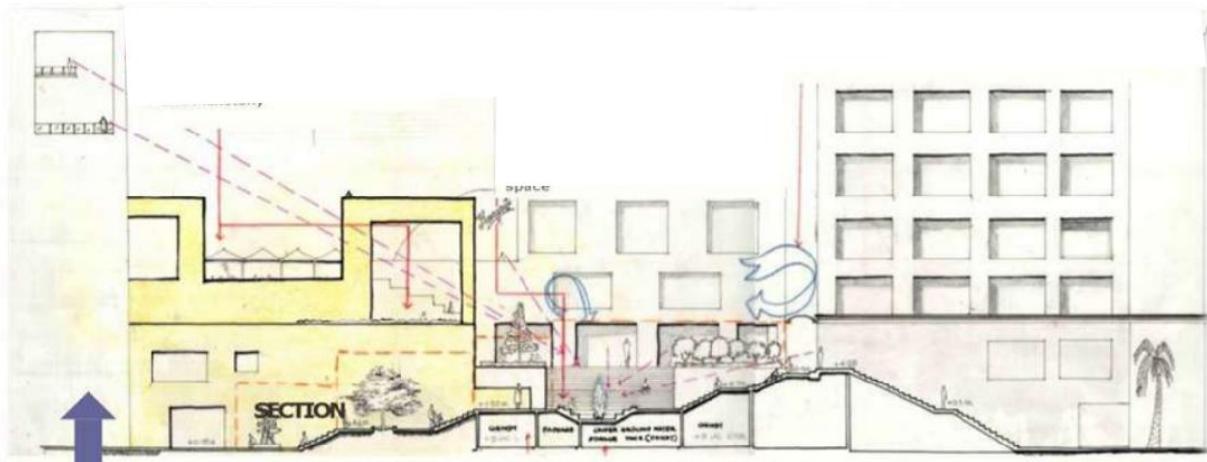


Fig 3.1.3 salt lake mall section 2



Fig 3.1.4 view of salt lake mall

3.2 WAVE MALL

Location	:	Noida
Site area	:	8777sq.m
Topography	:	Plain
No.of exits	:	2
No.of entries	:	2
Set backs	:	25m front,side 7m
Ground coverage	:	40%
Total built up area	:	21000sq.m
Height	:	24m(g+5)

Wave Mall in Noida houses luxury brands, multiplexes, and a food court, making it a one-stop shopping destination. Wave Mall, Noida also includes Wave Cinemas, Noida, a spectacular 5 screen multiplex with world-class auditoriums and the Platinum Lounge for the ultimate luxury experience.

The mall's main concept is a multiplex with particularly large or opulent aspects such as 4k projectors and 4D blockbusters such as Avengers.

4K projectors and 3D effects are among the attractions of this multiplex. In the multiplex, there is a luxurious lounge. Fiber glass has been used to cover the antrium in the

entrance lobby, allowing light to pass through while also effectively covering the space and reducing the use of artificial lighting.

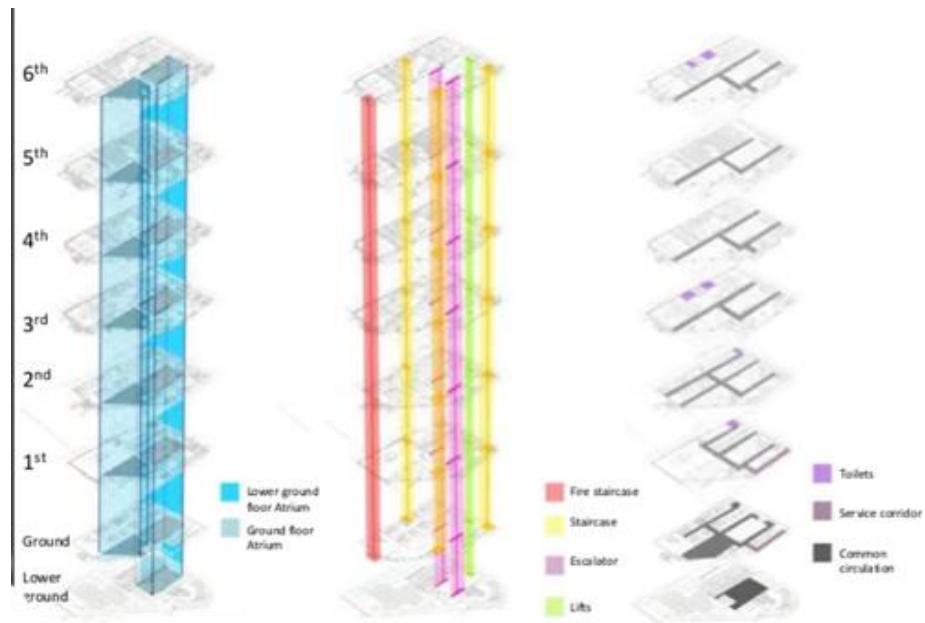


Fig no 3.2.1 Zoning of wave mall



Fig no 3.2.2 views of wave mall

3.3 FORUM MALL

Location : Kukatpally, hyderabad.
Orientation : North -south direction.
Total Built Up Area : 8,22,365 sq.ft.

Total GLA	: 8,22,365 sq.ft.
Total Carpet Area	: 5,34,535 sq.ft
Unique Positioning	: Community Oriented Lifestyle and Entertainment Center
Total no of Stores	: 139
Total no of Kiosks	: 22
Av. Footfalls Weekdays	: 15,000
Av. Footfalls Weekends	: 30,000
Catchment – Primary	: Kukatpally, Miyapur, Ameerpet, Madhapur, Hitec City, Kondapur, Hafizpet, Gachibowli
Catchment – Secondary	: Jubilee Hills, Banjara Hills, Panjagutta, Bowenpally, Mehdipatnam, Khairtabad, Secunderabad.
No. of floors	: 6
4-wheeler parking capacity	: 1200
2-wheeler parking capacity	: 1000

The mall's main concept is a north-south orientation, which reduces the amount of sunlight produced by the sun in the mall while still providing gathering places.

Nowadays, multi-level parking is a popular choice. Alco panels are embedded in the glass facade. Space arrangement.

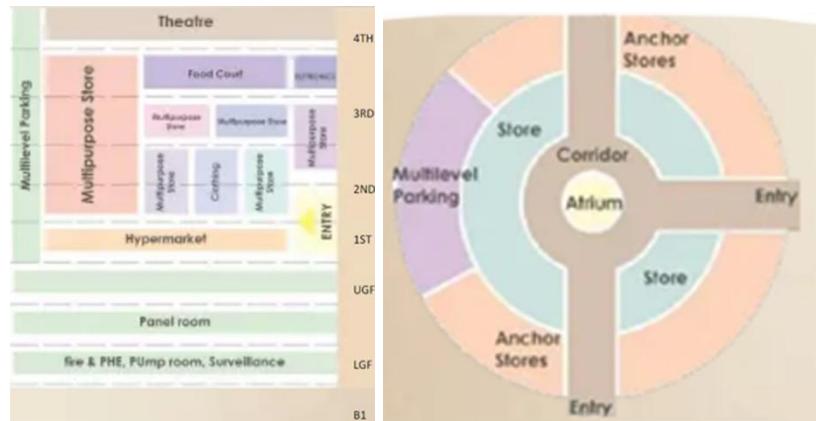
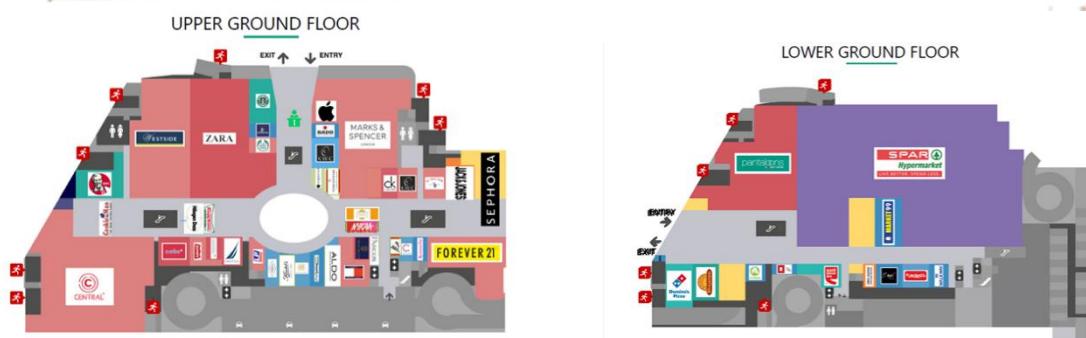


Fig no 3.3.1 Horizontal and vertical zoning



FIRST FLOOR



SECOND FLOOR



FOURTH FLOOR



Fig 3.3.2 Plans of forum mall

CHAPTER 4

4.1 STANDARDS:

4.1.1 Set back restrictions:

Height of the Building (in m.)	Minimum front open space (in m.)	Minimum open space on remaining sides (in m.)	Height of building (in meters)	Minimum abutting road width required (in meters)	Minimum all-round open space on remaining sides (in meters) *
(1)	(2)	(3)	above	Up to	
Up to 15		6	1	2	3
Above 15 & Up to 21 mt.		7	-	21	12
Above 21 mt. & upto 24 mt	12	8	21	24	12
Above 24 m & up to 27 m		9	24	27	18
Above 27 m & upto 30 m		10	27	30	18
Above 30 m & up to 35 m		11	30	35	24
Above 35 m & upto 40 m		12	35	40	24
Above 40 m & up to 45 m	13	13	40	45	24
Above 45 m & upto 50 m	14	14	45	50	30
Above 50 m	15	16	50	55	30

After 55m 0.5m additional setback for every 5m of height shall be insisted

Fig no 4.1.1.1 Set back details

4.1.2 Turning radius of physically challenged:

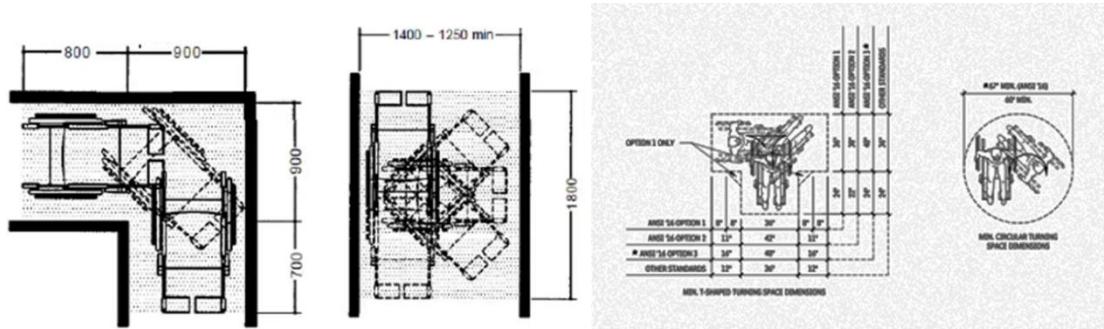
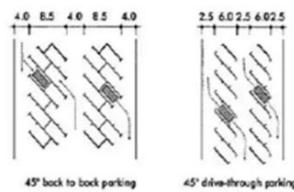


Fig no 4.1.2.1 Turning radius of physically challenged

4.1.3 Parking details:

Type of Building	Parking area to be provided as percentage of total built up area (inclusive of all internal aisles, driveways, stairs, etc.)	
	In Municipal Corporation Area	In other areas
Multiplex Complexes (inclusive of all activities areas)	60 %	50 %



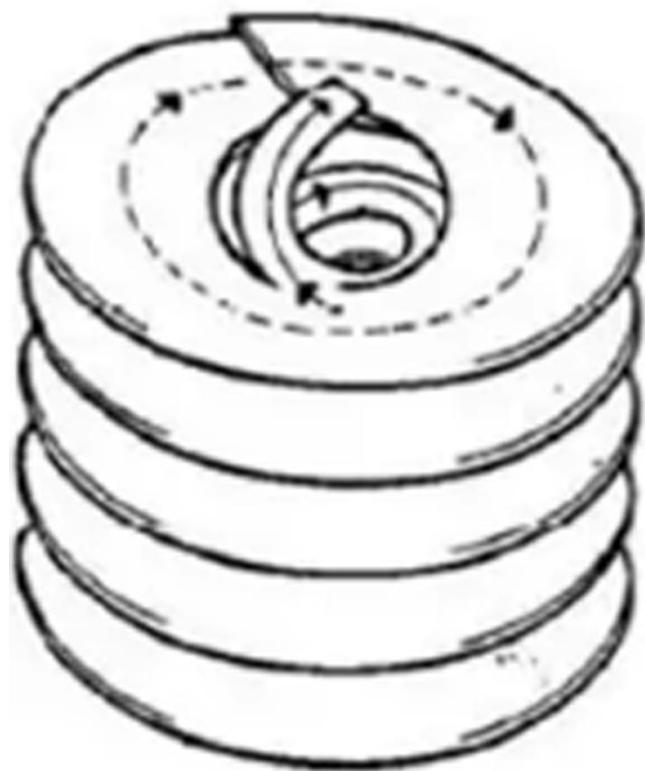
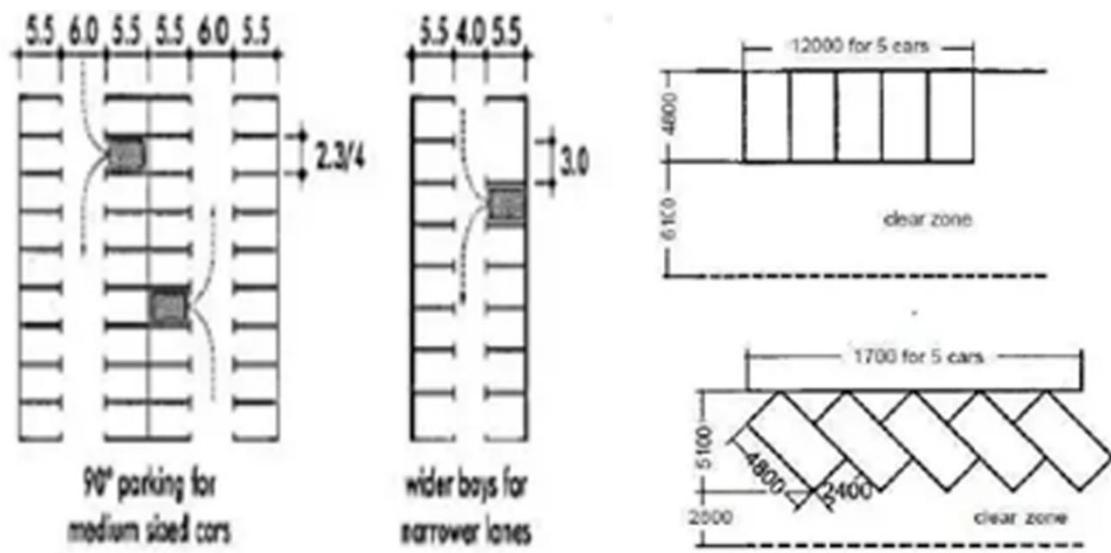


Fig no 4.1.3.1 Parking details

4.1.4 Escalator details

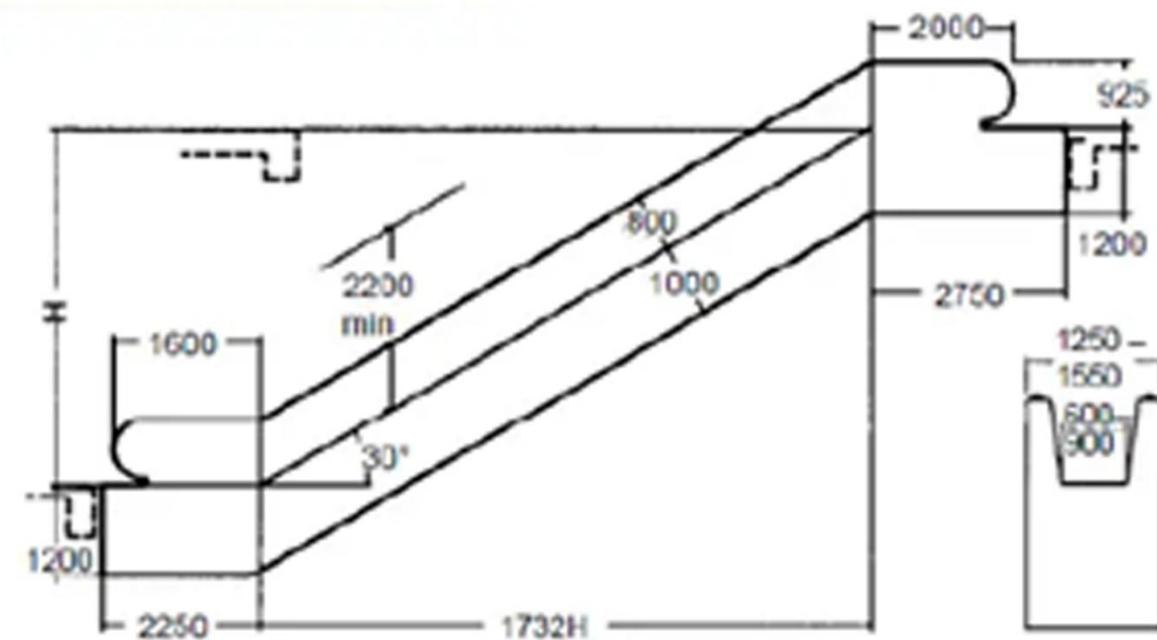


Fig no 4.1.4.1 Escalator details

4.1.5 Lift layouts:

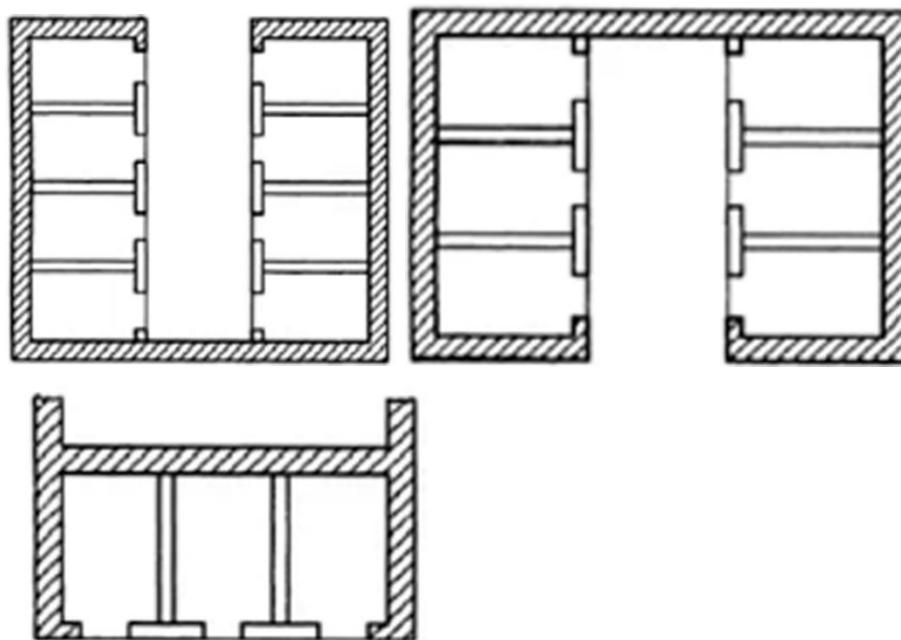


Fig no 4.1.5.1 Lift layout

4.1.6 Shops layouts:

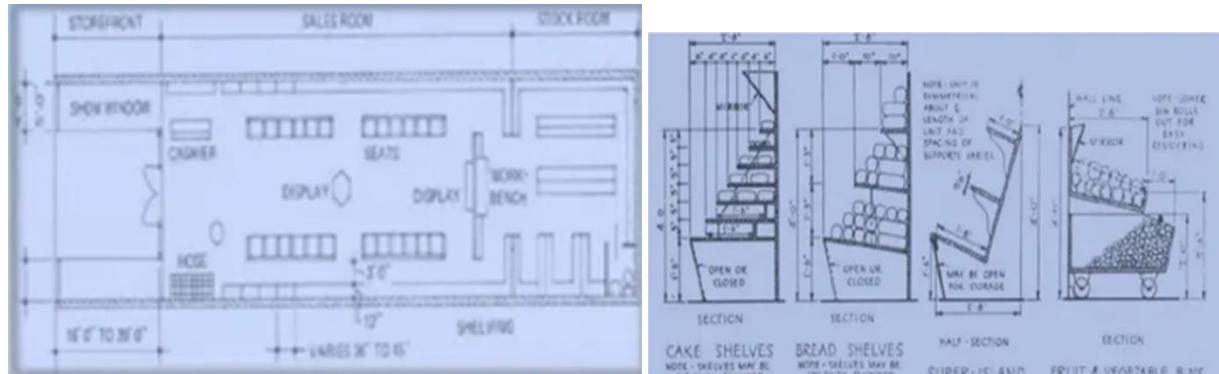


Fig no 4.1.6.1 shop layout

4.1.7 Sanitary details:

Sl.No.	Sanitary Unit	For Public		For Staff	
		Male	Female	Male	Female
1	Water Closet	One for 100 persons upto 400 persons. For over 400 persons, add at the rate of 1 per 250 persons or part thereof	Four for 100 persons upto 200 persons. For over 200 persons, add at the rate of 1 per 50 persons or part thereof	One for 15 persons Two for 16-35 persons	Two for 1-12 persons Four for 13-25 persons Add at the rate of 1 per 6 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.	One in each W.C.
3	Urinals	One for 50 persons or part thereof	**	Nil upto 6 persons One for 7-20 persons Two for 21-45 persons	**
4	Wash Basins	One for every 200 persons or part thereof	One for every 200 persons or part thereof	One for 1-15 persons Two for 16-35	One for 1-12 persons Two for 13-25 persons

Table 1 Sanitary details

4.1.8 Hvac mechanism:

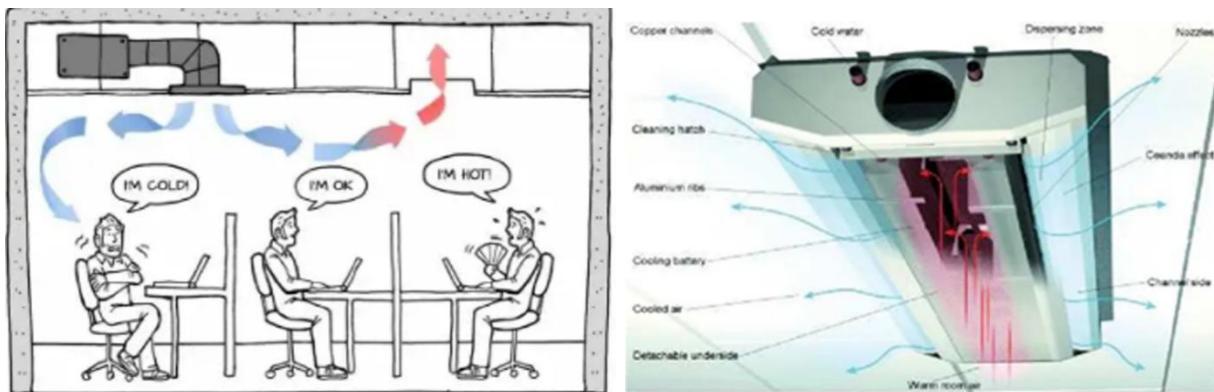


Fig no 4.1.8.1 Hvac details

4.1.9 Fire safety rules:

GROUP OF OCCUPANCY (see IS : 1641-1988*)	MAXIMUM TRAVEL DISTANCE CONSTRUCTION (see IS : 1642-1988 †)
---	--

	m	m
Residential (A)	22.5	22.5
Educational (B)	22.5	22.5
Institutional (C)	22.5	22.5
Assembly (D)	30.0	30.0
Business (E)	30.0	30.0
Mercantile (F)	30.0	30.0
Industrial (G)	45.0	30.0
Storage (H)	30.0	30.0
Hazardous (J)	22.5	22.5

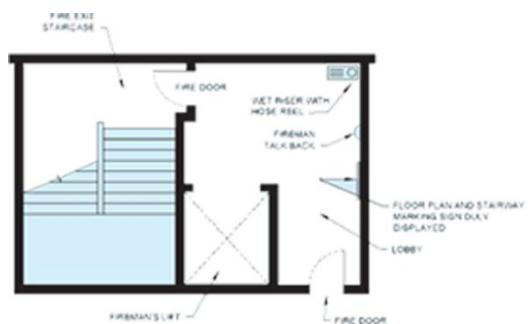


Fig no 4.1.9.1 Fire safety norms

CHAPTER 5

5.1 SITE STUDY:

Location : madhapur

Coordinates : $17^{\circ}26'30''N$ $78^{\circ}23'30''E$

Pincode :500081

Landmark :Cyber tower



Fig 5.1.1 landmarks of site

Proximity:

Shilparam bus stand with in 500m

Metro station with in 1km

Borbanda railway station in 4kms

Begampet airpot in 15kms

Main bus stand with in 10kms

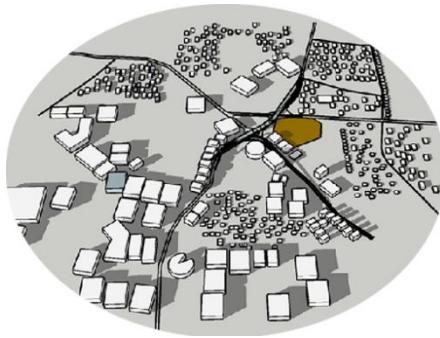


Fig 5.1.2 surroundings

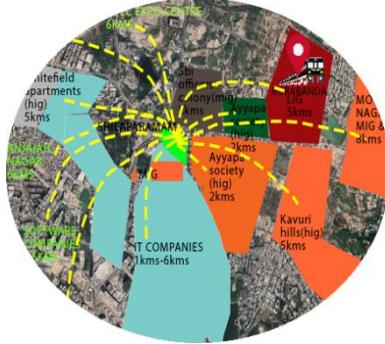


Fig no 5.1.3 Hmda land use map

SWOT ANALYSIS:

STRENGTH:

- Three entries
- Good sensory views
- Good proximity of road ,train and flight
- Site is surrounded with residential,commercial it hub which increase more demand to the project.

WEAKNESS:

- Traffic is major issue
- East face views are restricted with high rise apartments

OPPOURTUNITY:

- Since the site is located in very busy area they some space to relax on weekends
- It hub of hitec city scale is increasing day by day so it demand opporunity to entertain those recuirtments.

THREATS:

-Since it is a flood prone area which lakes are located near to the site.

CHAPTER 6

ARCHITECTURAL DESIGN

6.1 SPATIAL REQUIREMENTS

6.2 CONCEPT

6.3 DETAILED DRAWINGS

6.4 MODELS

ABAD AVENUE MALL

CONCEPT & ZONING

Name:J.Rajesh
Reg no:37210018
Batch:2017-2022



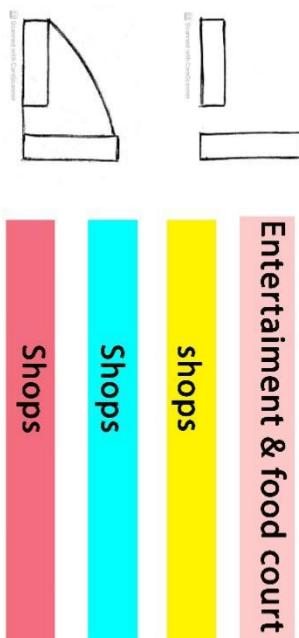
Area statement:

S.no	Location	near cyber towers, madhupur
1	site area	44500sq.m
2	ground coverage	22250sq.m
3	fsi	7.5
4	permissible built up	1115000
5	o/s	45450
6	set back	20m front, remaining 12m
7	Achieved built up	101500sq.m
8	Achieved fsi	2.3
9	Height of the building	25
10	No of the floors	14
11	No of floors	26
12	Floor height	4.5m
13	No of parking	450 cars & 500 bikes
14	Passenger lifts	6
15	Fire escape spots	5
16	Drive way width	10m
17	basement height	3.5m

Form evolution: Vertical zoning:

Vertical zoning:

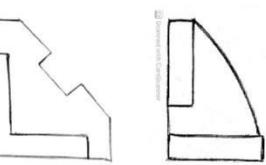
Entertainment & food court



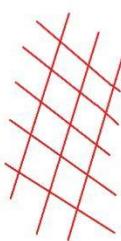
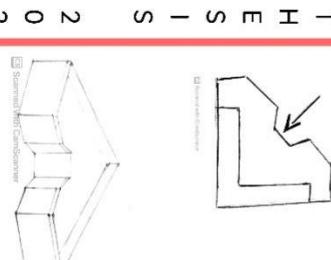
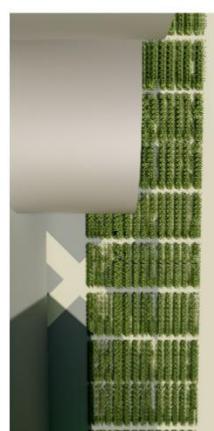
Shops



shops

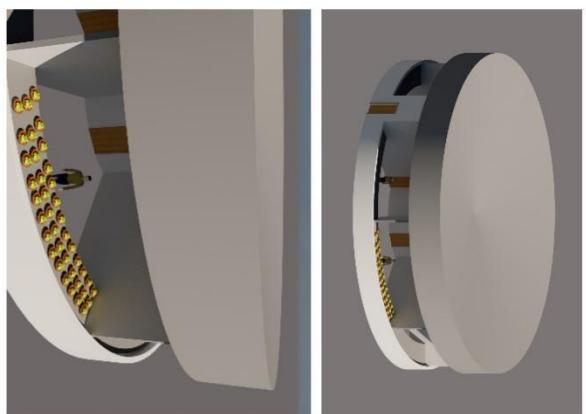
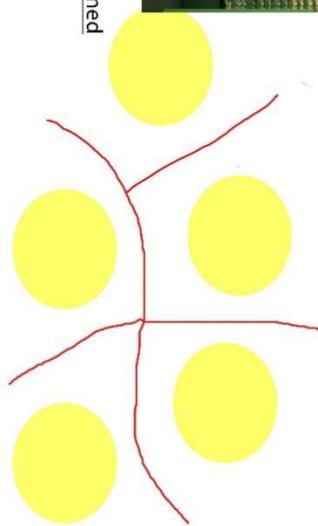


Parking & services

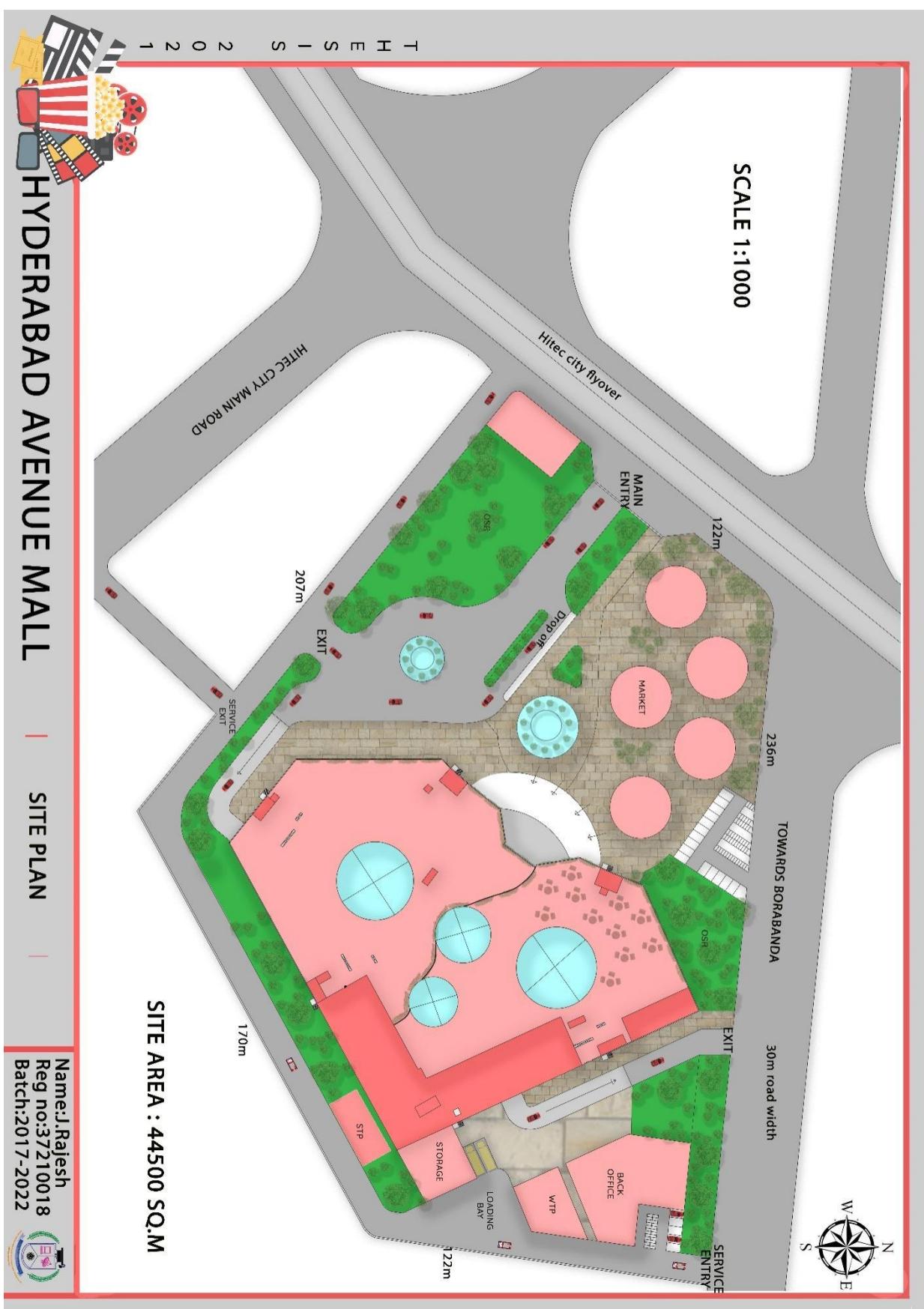


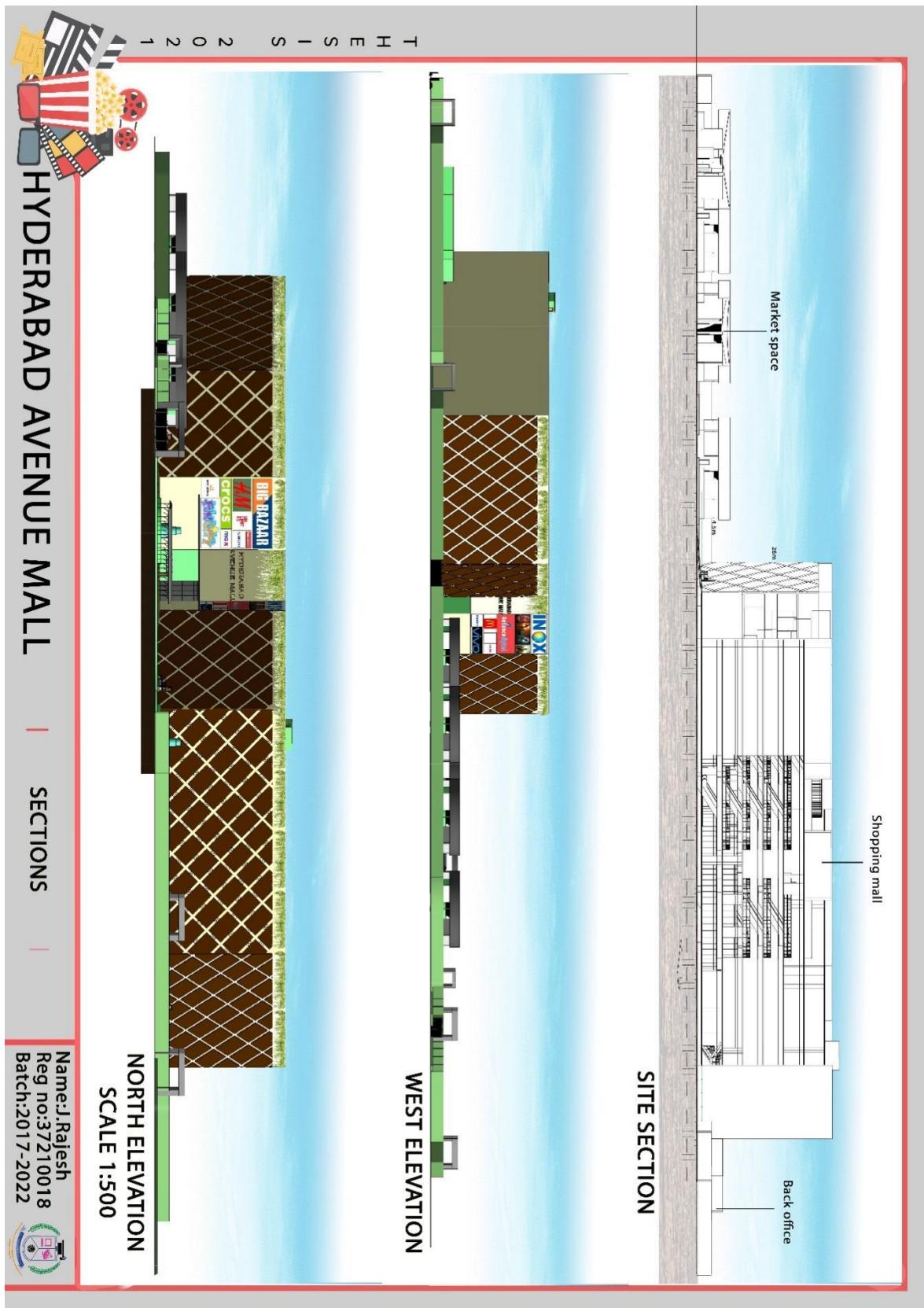
Street marketing is a new concept in malls now which can be designed flexible to all kind of people.

Facade having diagonal shape which reflect form shape having lights in between path creates good attraction on night views.



3	Function	Surren1 - 90 sq.m/25 capacity					
4	Storage	12005.4 m					
5	Toilets	6005.4 m					
6	Services						
	Wtp						
	Bms						
	Fire sump						
	Electricity back up room						
	Ahu						
	Domestic tank						
	Flushing tank						
	Drivers bunge						
	Dg room						
	Ht panel room						

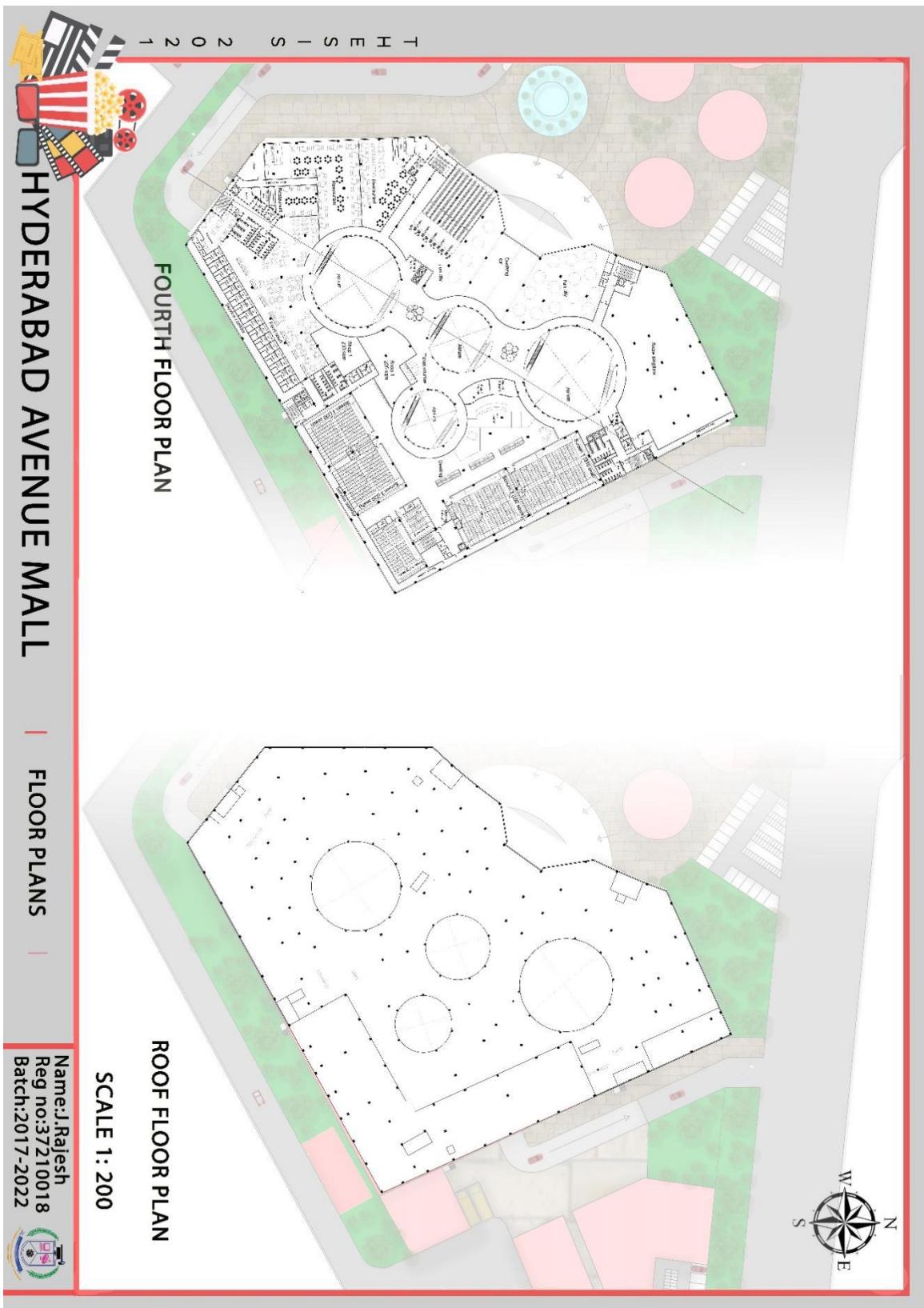


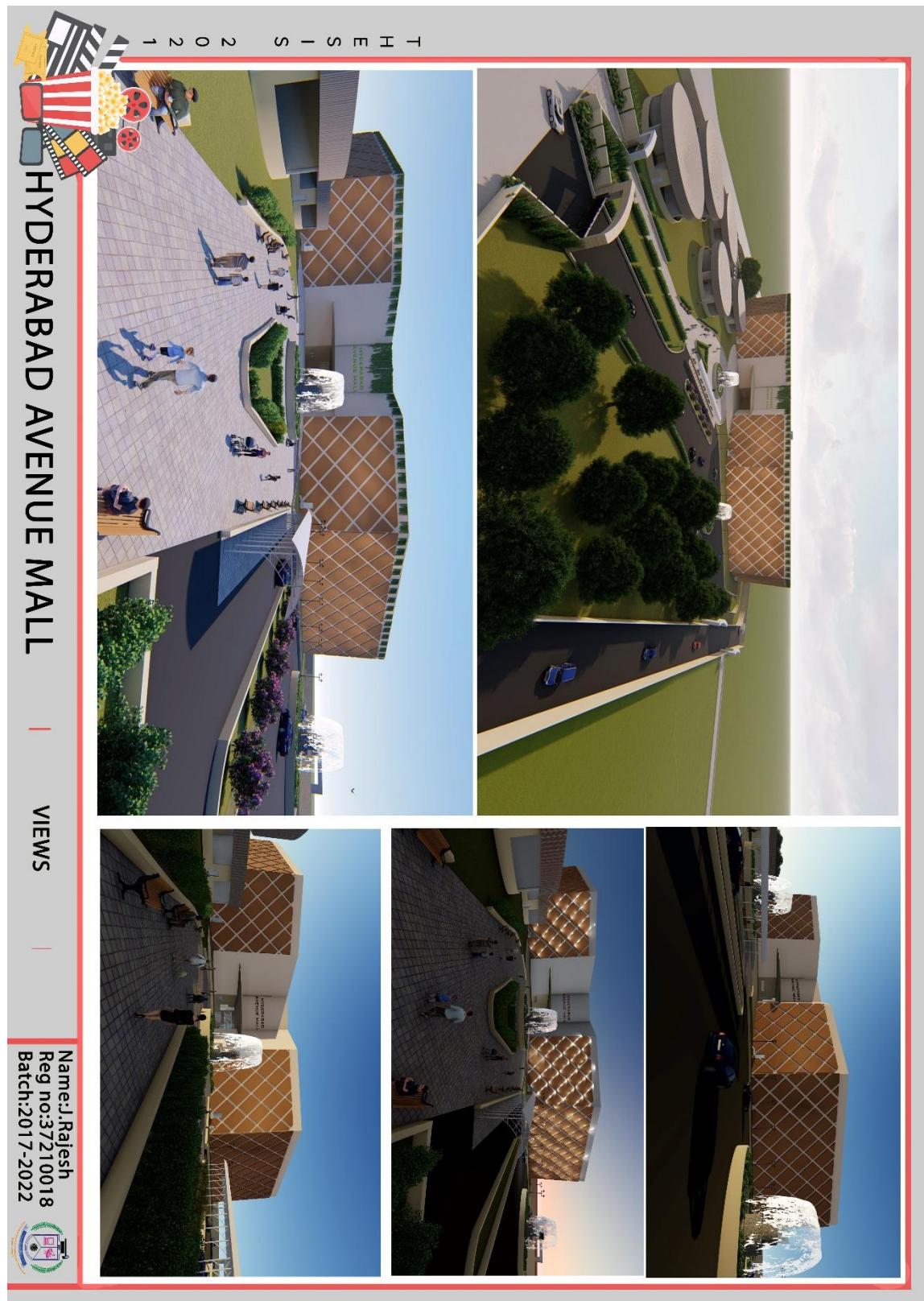








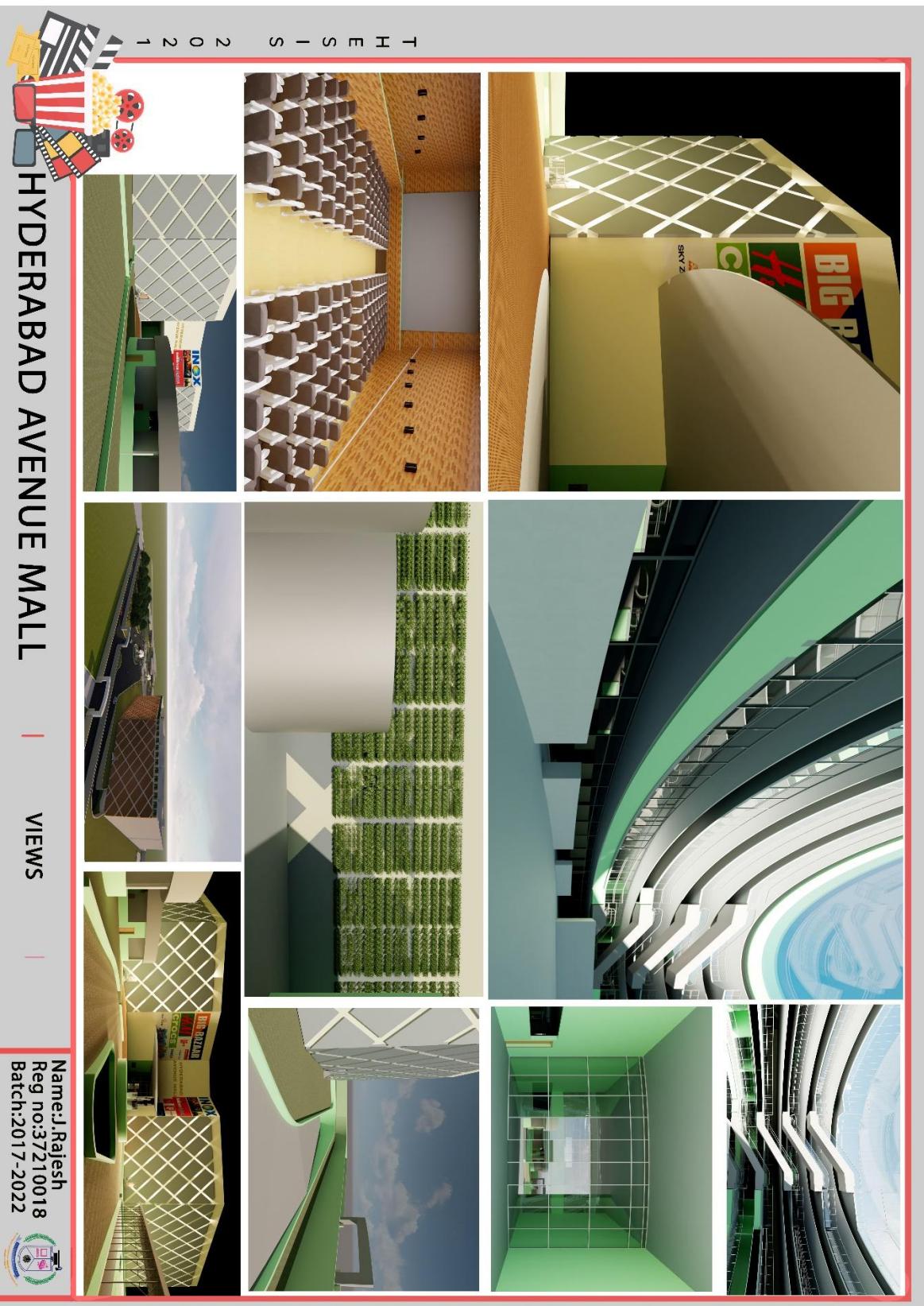




HYDERABAD AVENUE MALL

VIEWs

Name: J.Rajesh
Reg no: 37210018
Batch: 2017-2022



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