

SITE(TOPIC) : CITY CENTRE
LOCATION: AT NOIDA, SECTOR-32

- THESIS GUIDE :
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ARCHITECTURAL DESIGN THESIS
2019-2020

SCHOOL OF ARCHITECTURE AND
PLANNING BABU BANARSI DAS
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CERTIFICATE

- I hereby recommend that the thesis, entitled “CITY CENTRE.”, prepared by Mr. MOHD AMIR under my supervision, is the bonafide work of the student and be accepted as a partial fulfillment for the award of Bachelors
Degree in Architecture, School of Architecture BBDU, Lucknow.

.....
(Signatures of the Guide)

.....
(Signatures: Dean)

Recommendation:

Accepted
Not Accepted

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Examiner 1

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Examiner 2

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Examiner 3

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Examiner 4

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Examiner 5

ACKNOWLEDGEMENT

I WOULD LIKE TO EXPRESS MY SINCERE THANKS TO MY THESIS GUIDE AR. SHAILESH KUMAR YADAV FOR GUIDING ME THROUGH OUT THE ARCHITECTURAL THESIS : FOR SUGGESTIONS AND INPUTS AT CRITICAL STAGES OF DESIGN TRANSITION THAT FINALLY HELPED TO SHAPE THE IDEA.

I WOULD DEEPLY THANK TO PROF. SANGEETA SHARMA AND THESIS CO-ORDINATORS :

AR. SHAILESH KUMAR YADAV AND PROF. URVASHI DIXIT FOR GUIDENCE THROUGH OUT ALL THE THESIS STAGES AND FOR HELP AND SUPPORT.

FINALLY I WOULD LIKE TO PAY MY GRATITUDE TO ALL THE FACULTIES OF SCHOOL OF ARCHITECTURE AND PLANNING(SAP) , B.B.D.UNIVERSITY LUCKNOW .

SUMMARY

THE PROJECT IS ALL ABOUT DESIGNING AN “CITY CENTRE” AT THE SITE OF NOIDA SECTOR 32. THE PROJECT AIMS TO CREATE A SPACE WHICH CAN FORM THE NODE FOR HOLDING AND EXPERIENCING COMMERCIALS, CULTURAL AND SOCIAL ACTIVITIES. TO PROVIDE A COMFORTABLE SPACE WHERE THE ACTIVITY OF ALL THE USER GROUPS ARE INVOLVED. THE CHALLENGE HERE IS TO DESIGN THE BUILDINGS TO FULFILL ITS PURPOSE MORE ADEQUATELY AND EFFICIENTLY .

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INTRODUCTION:

The original basis for city center to form was the people's need to come together for different purposes including trade, exchange of goods, other services, specific resources, with their security etc. the essential factor was that activities required people to communicate. the city today represents the total environment of its inhabitant and provides for not only the functional requirement of food, shelter and housing but also encourage **interaction between people and their environment**. it provides huge place in which many facilities like entertainment, trading, offices, informative places, exhibitions etc. can exist.

INTRODUCTION OF THE PROJECT:

It is a mixed-use commercial project which is at Karkarduma. this is being design to offer shopping, hotel, entertainment, business and hospitality facilities at one place.

NEED OF THE PROJECT:

Today for shopping, entertainment, exhibitions, offices and etc. required a place which should be properly designed to fullfill the requirement. so I want to explore my design on those areas to develop their functions .



REASON FOR SELECTING THE TOPIC:

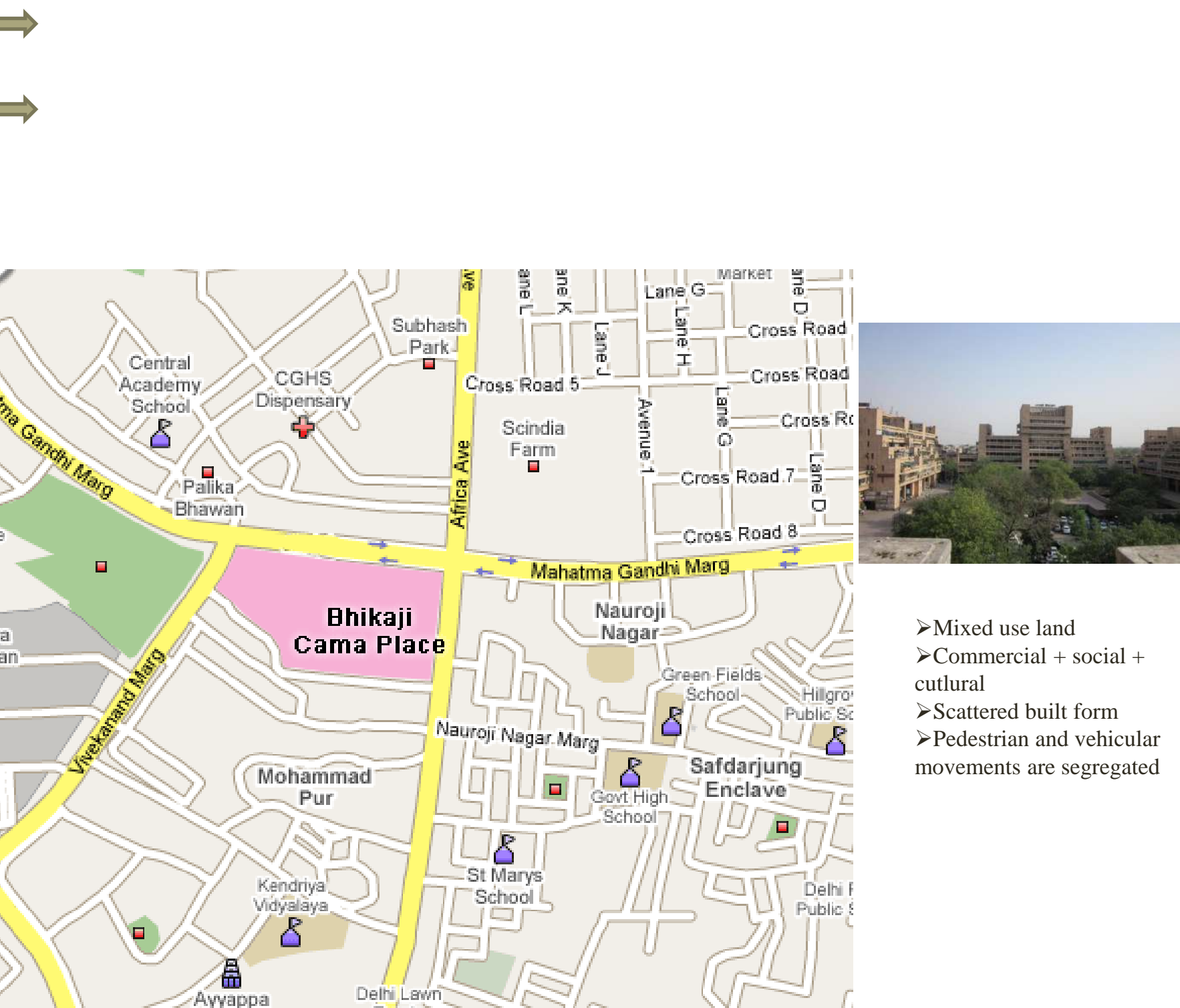
The concept of markets have changed. Now people prefer to shop online or to go to super markets which are having branded things of high cost. They prefer more to save time rather than try and save a few rupees at the local market. But people like me cannot afford to go to expensive commercial outlets. At least the remaining neighbourhood markets should be preserved. My intention is to combine the formal, semi formal and informal spaces so that it can serve unbiasedly to higher, middle and lower income group of people.

AIM:

To create a space which can form the node for holding and experiencing commercial, cultural and social activities. To provide a comfortable space where the activity of all the user groups are involved.

Case Study I- Bhikaji cama Place

Location :NEW Delhi (RK PURAM)
Type :Mixed Use Commercial
Plot Area :40 Acre
Built Up Area :466971 Sq. Mt
FAR : 2.91
Ground coverage : 31.28%
Parking : 14010 cars



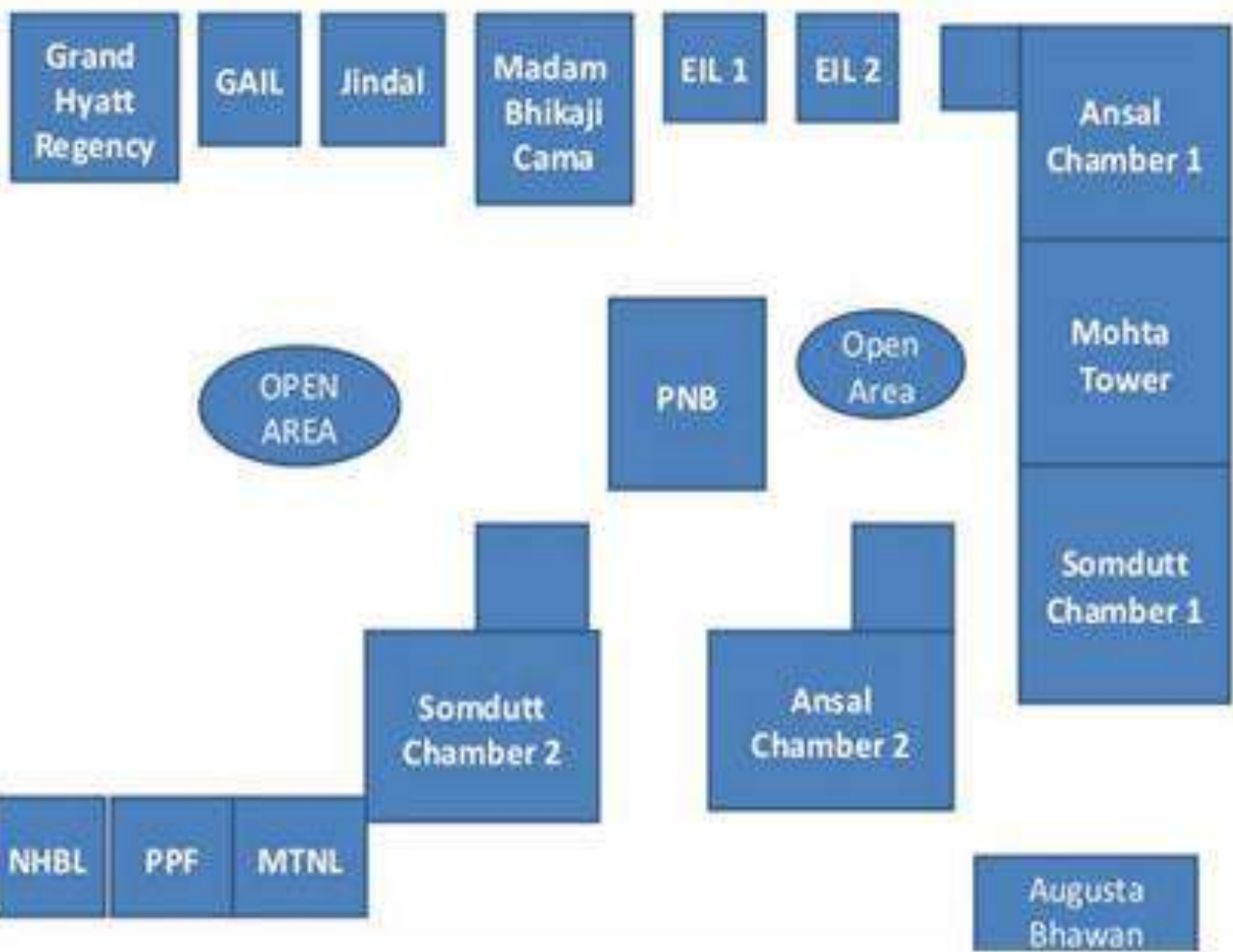
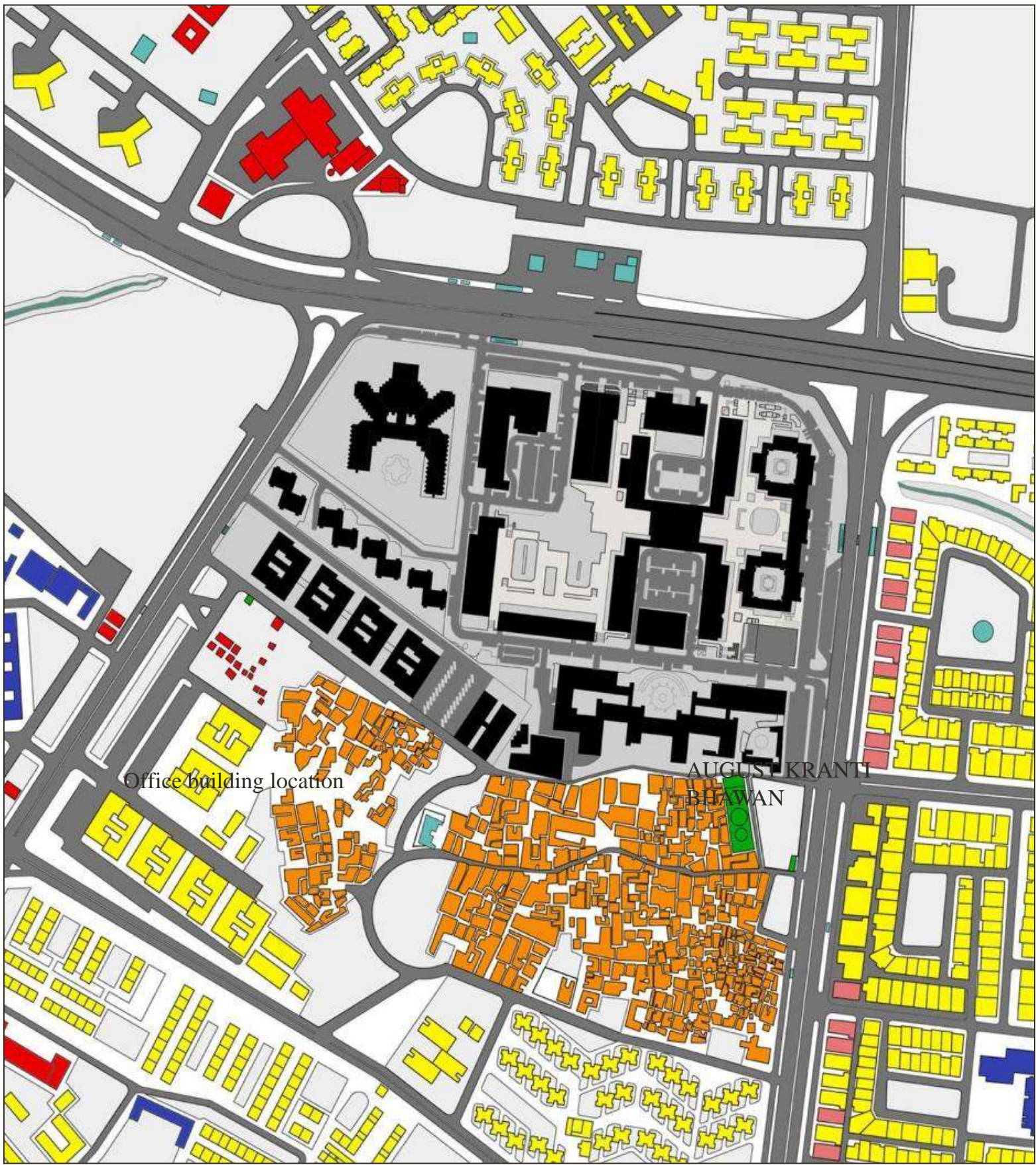
LOCATION

Bhikaji Cama Place is a mixed use commercial place spread over 40 acres in RK Puram, South Delhi. It is easily accessible from Ring Road. Nearby metro station is Aims with travel distance 3Km.

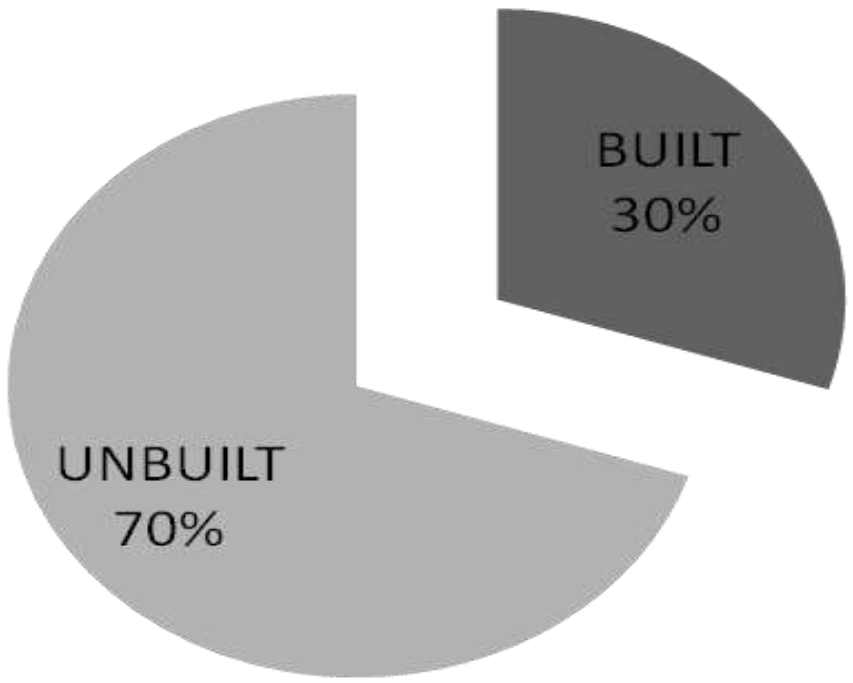
SITE CONTEXT

- SfdarganJ Airport - 5.7 Km
- IGT Airport -8.9 Km
- AIIMS Metro station - 3 Km

LAND USE SITE PLAN



BUILT – UN BUILT
RELATIONSHIP



- RESIDENTIAL
- COMMERCIAL
- MIXED USE
- INSTITUTIONAL
- HISTORICAL
- VILLAGE LAND



ANSAL CHAMBER



ANSAL CHAMBER

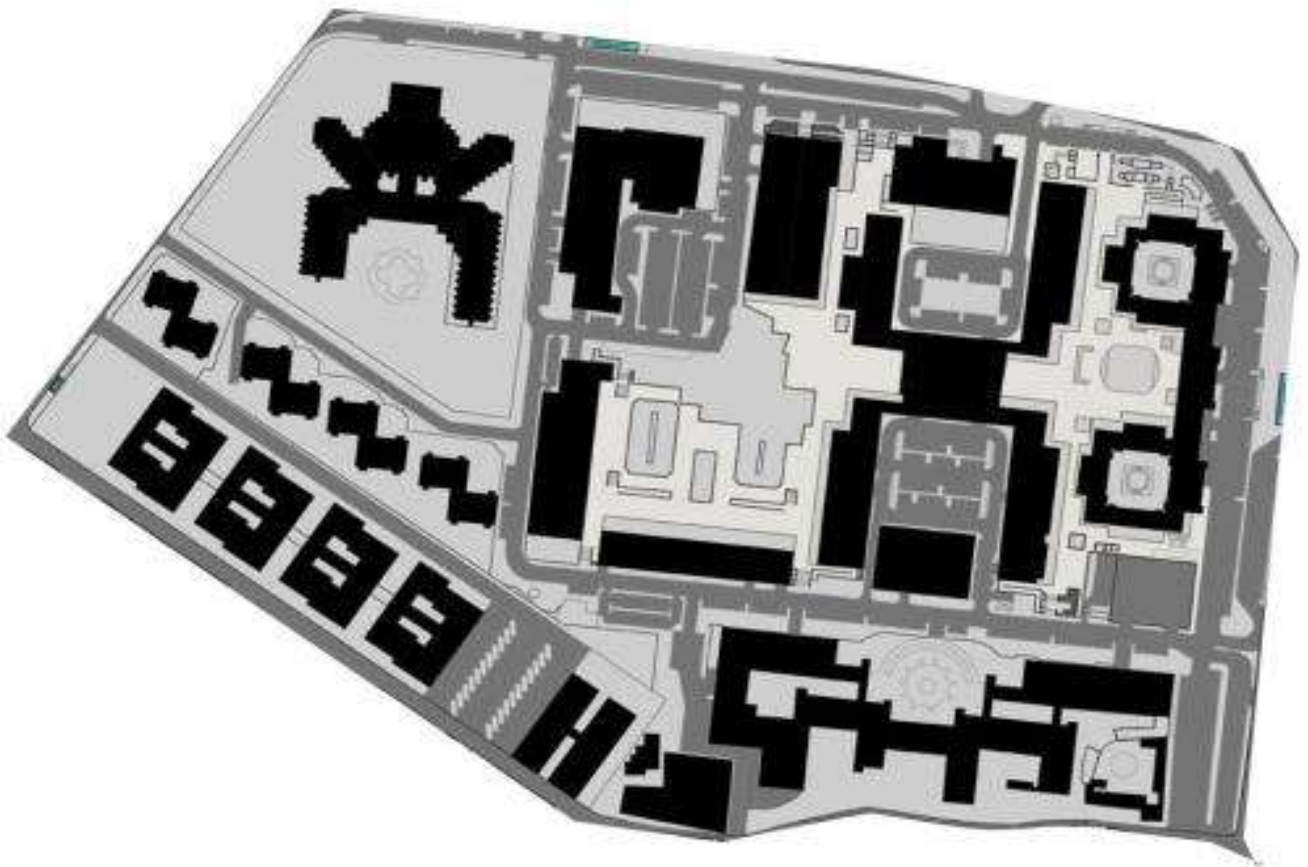


SOMDATT CHAMBER



MAHANAGAR
TELEPHONE
NIGAM LTD.

- Coaching centers, training institutes
- Police post, fire post
- Telephone exchange
- Petrol pump/CNG station
- Bus terminal



BUILT FORM

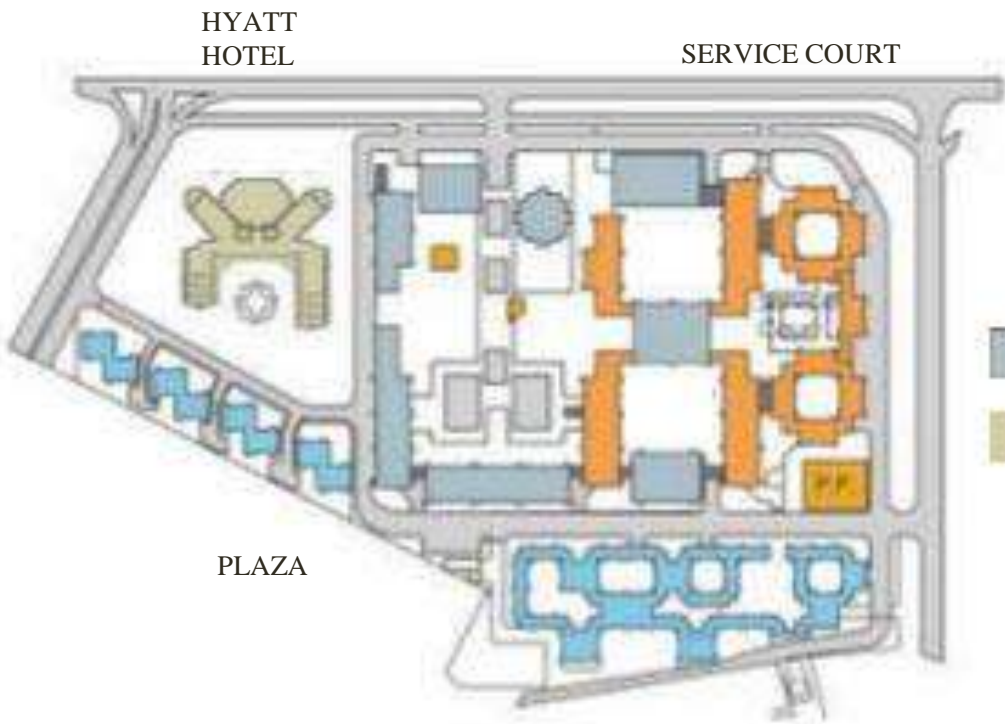
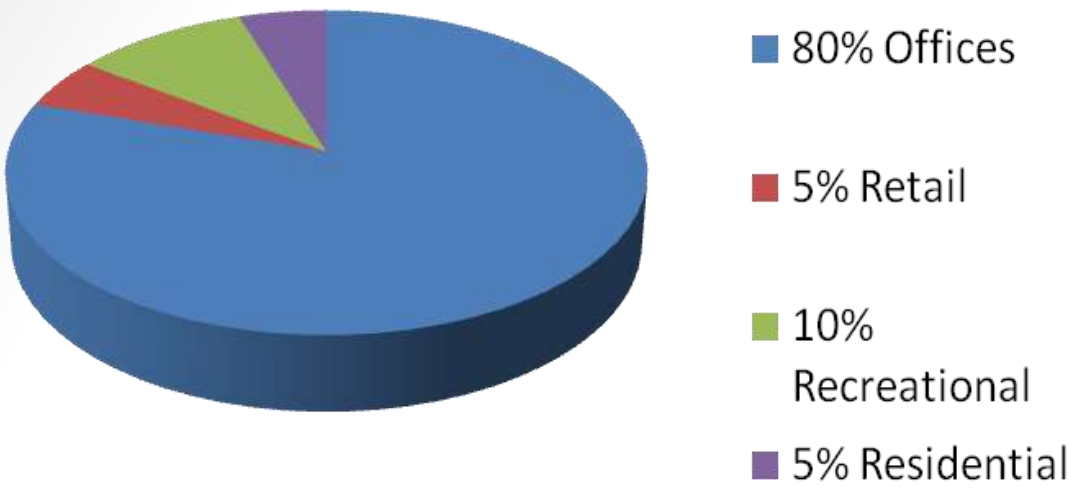


The sequence of open spaces is intended to allow people to gather on a raised podium.

MISED USE COMMERCIAL ANALYSIS

- Retail shopping
- Stockists and dealers of medicines
- Commercial and offices of local bodies
- PSUs, cinema, cineplex
- Hotel
- Restaurants
- banquet halls
- Socio-cultural activities/recreational club
- Service apartments
- Bank, ATM
- Guest house
- Nursing home
- Informal trade

Case Study I -Bhikaji cama Place



- HOTEL
- OFFICES
- SHOPS AND OFFICES
- GOVT. AND SEMI GOVT. OFFICES

TRAFFIC VOLUME

In Morning	In Evening
Two wheeler - 2200/hr	Two wheeler - 3200/hr
Four wheeler - 3700/hr	Four wheeler - 4400/hr
Auto rikshaw - 700/hr	Auto rikshaw - 500/hr
Others - 100/hr	Others - 220/hr



Main road

Main road connected with 4 ways
 (mahatma gandhi marg & africa ave marg)

STRENGTHS

- Retail along the pedestrian movement encourages the use of plaza.
- Staggered built form in plan and elevation gives climatically good response.
- Staggered built form helps to give shades on open area.
- Segregated pedestrian and parking in levels.
- Same use of material represents built-unbuilt connectivity.

WEAKNESS

- Lack of maintenance , which affecting the environment.
- Local shops fails to attract local shoppers.
- Open court needs vegetation as it is maximum hardscape on plazas



- The steps are damaged at several places due to lack of maintenance.
- Have no handrail.
- Even the approach to these steps is found encroached by parked cars.



- There are some negative areas like narrow width ramp which has failed to serve now it is used as dumping area.

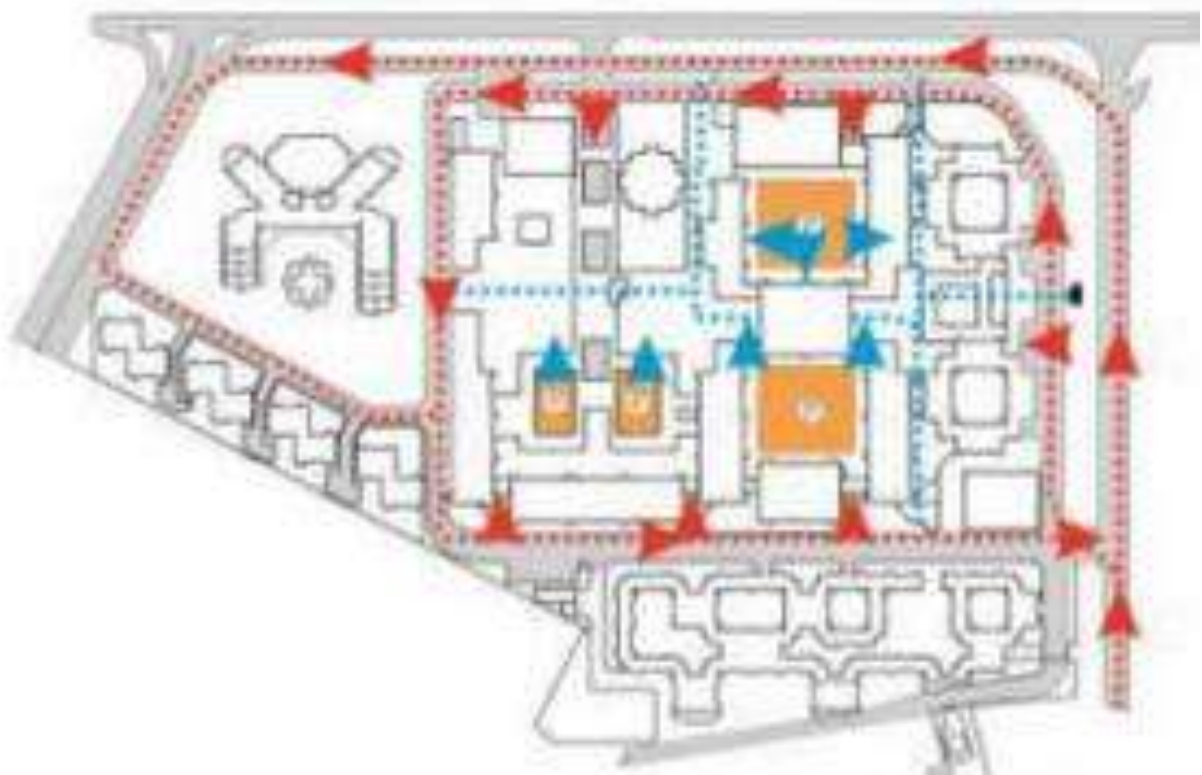
CIRCULATION

- Architectural controls regulate the facades of all building.
- Planning of buildings around service courts.
- Vehicular circulation around the periphery.
- Estimated population is five lakh.

- Complete segregation of pedestrian and vehicular flow was achieved by creating a pedestrian level at about 3 m above the ground.
- Each bldg block can be approached directly by car or through the pedestrian podium.
- Corridors are connecting buildings and making pedestrian movement possible.



- Designed as one continuous structure enclosing a series of courtyards varying in scale and function it consist of streets bridged also.
- A continuous structure, comprising small bldg blocks of six-, nine-, and 12- storey units, provided an opportunity.



- Vehicular movement
- Pedestrian movement
- Parking area

- Building planned around number of courtyards used as car parking and food service. & with SDM Authorised parking in the mid of the Buildings



Case Study 2- SELECT CITYWALK

Location :Saket District Centre, South Delhi

Type :Mixed Use Commercial

Plot Area :15884.5 Sq.Mt

Built Up Area :62862.32 Sq. Mt

Commercial Area :24281 Sq Mt

Retail Area :8498.3 Sq.Mt

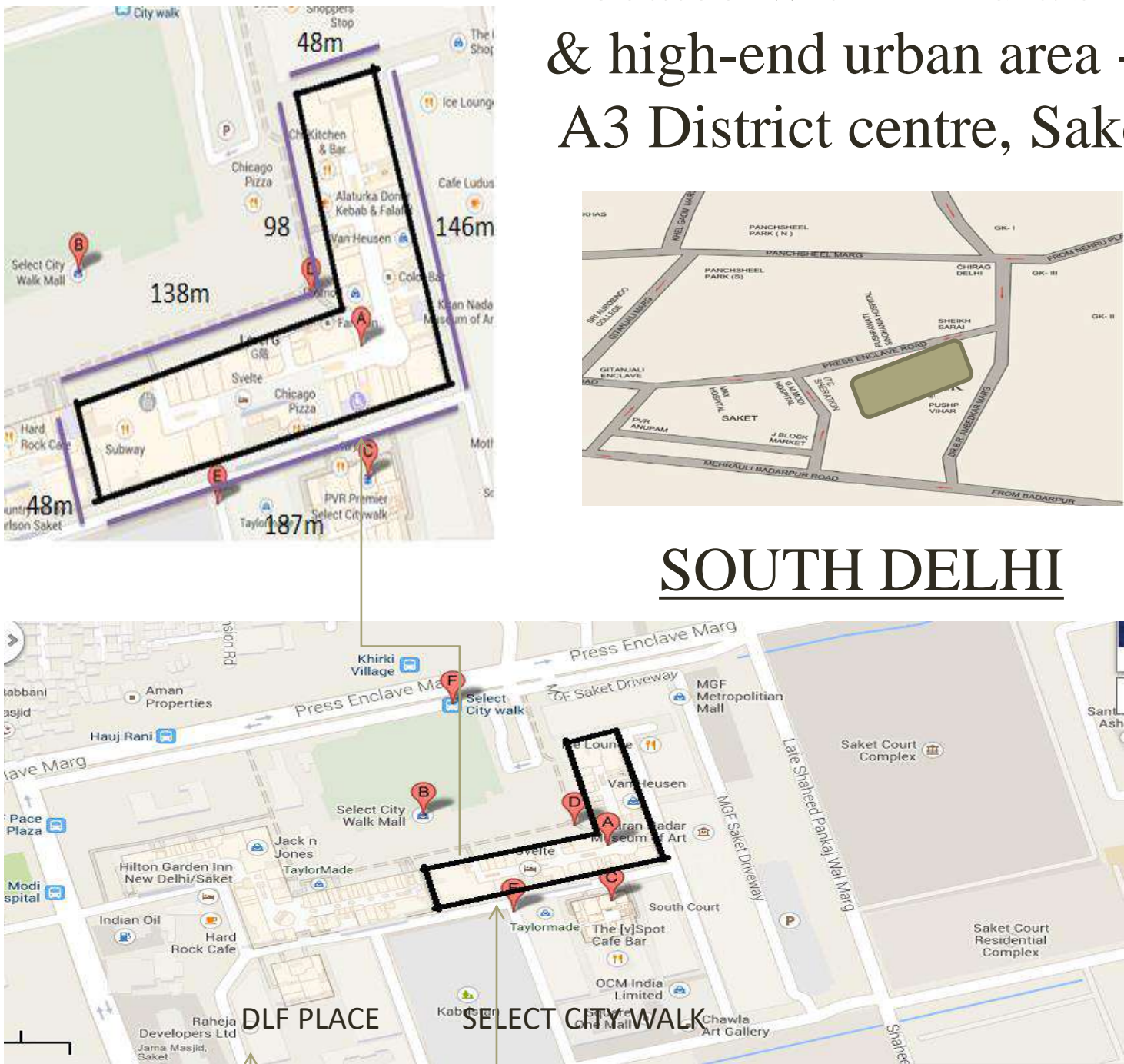
(Multiplex & Mall)

Landscape Area :15782 Sq. Mt

Architects :Tevatia Chauhan

LOCATION

➤ Located within India's most affluent & high-end urban area -South Delhi. A3 District centre, Saket New elhi.



SOUTH DELHI



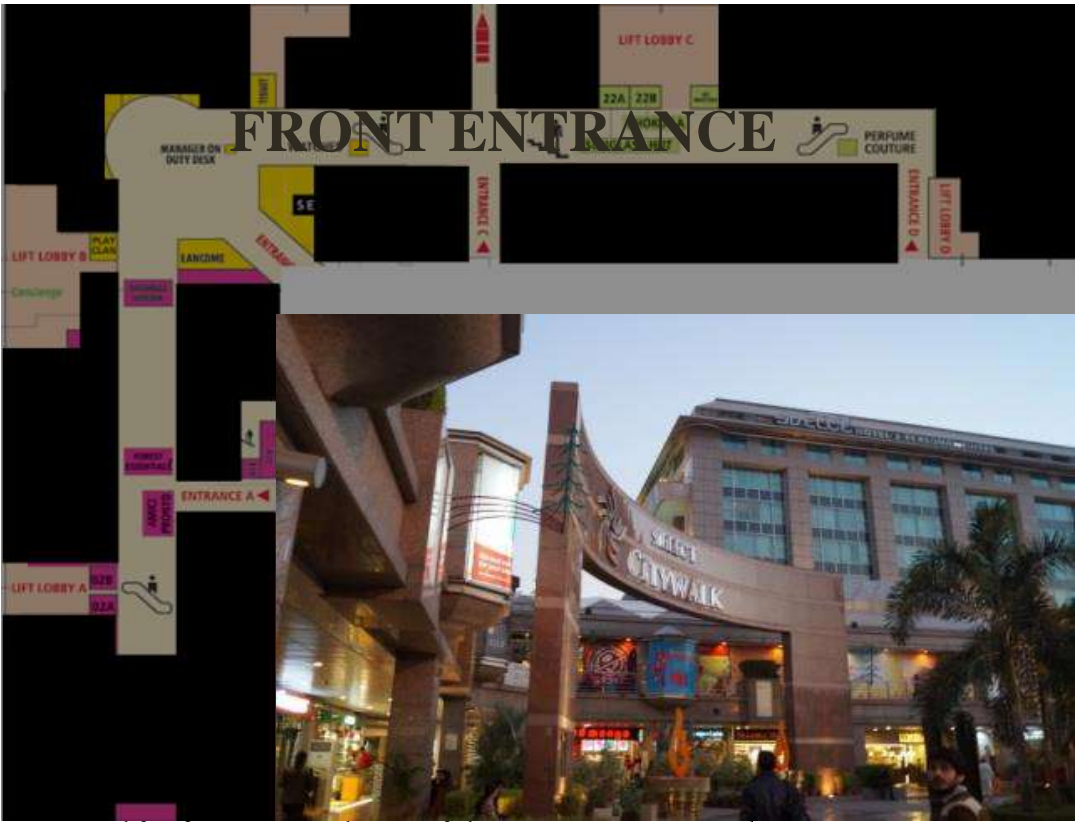
➤ There are five functional malls:

1. Select Citywalk,
2. Metropolitan Mall,
3. DLF place(COURTYARD)
4. Southern park (under construction)
5. South court

Select CITYWALK houses

- 3 floors of shopping area
- 2 separate 5-storey blocks containing
 - I. Office space
 - II. Serviced Apartments
- Outdoor open-air plaza, approx. 1 lakh sq. ft.
- Water bodies & fountains
- An amphitheatre
- Six screen PVR Cinemas

REAR ENTRANCE



ENTRANCES

- There were 2 main entrances to the mall.
- One from the front & 2nd from the rear side.
- On the front side, 4 main entries were present.
- Passage Running on one side of L-shape building, is
 1. 2.5m wide
 2. Distance between columns- 6m
 3. Column size-600x450

CONNECTIVITY THROUGH SITE

- Bust stop- Khirki Village, 100m
- Malviya nagar metro station -1km
- IGI airport-15.6 km
- DLF place mall-200 m
- MGF metropolitan mall-100 m
- Qutub minar-3.7 km

INTRODUCTION

- Select CITYWALK is a 1.3 million Sq. ft air-conditioned, vibrant and upscale destination Shopping Centre.
- It is a commercial cum recreational hub located in Saket , South Delhi.
- It was opened in 2007 for public.
- It is planned such that the district centre consists of 1,500,000 sq ft (140,000 m²)



Select Citywalk is a premier shopping mall located in the Saket District Centre, in Saket New Delhi. The 85,000 sq m retail development is spread over 6 acres (24,000 sq m) and includes a multiplex, serviced apartments, offices and public spaces. The mall was developed by Select Infrastructure, a joint venture between the Select group and the Aarone group. It opened to the public in October 2007

Case Study 2- SELECT CITYWALK

PLANNING CONCEPT

- The planning of the SCW mall is divided into 4 categorization-
- 1. Family & tradition space
 - 2. Celebration (centre-stage)
 - 3. High-voltage (youth)
 - 4. Open plaza/ Landscaped area (ground floor)



- 4 lift lobby
 - 2 washrooms
 - 1 feeding & resting room
 - 3 escalators
 - Atrium at entrance
 - 4 different entrances at front side.
 - 1 entry from rear side.
 - 6 Staircases
- Green: Youth
 - Yellow: Centre Stage (Celebration)
 - Purple: Family & Tradition
 - White: Corridor & Atrium



FIRST FLOOR PLAN

- 4 lift lobby
 - 2 washrooms
 - 3 escalators
 - 6 Staircases
- Green: Youth
 - Yellow: Centre Stage (Celebration)
 - Purple: Family & Tradition
 - White: Corridor & Atrium



FLOOR PLANS

NO OF SHOP @ GROUND FLOOR = 70



FIRST FLOOR PLAN

CIRCULATION

- Linear Pedestrian movement inside the project.
- Circulation along atrium.
- Street corridor circulation on first floor with small shops and sitting area



SECOND FLOOR PLAN

- 4 lift lobby
 - 2 washrooms
 - 3 escalators.
 - 6 Staircases
 - Exit of cinema from 2nd floor
- Green: Youth
 - Yellow: Centre Stage (Celebration)
 - Purple: Family & Tradition
 - White: Corridor & Atrium
 - White: Terrace Garden for food court



GROUND FLOOR PLAN



SECOND FLOOR PLAN

NO OF SHOP @ FIRST FLOOR = 33

BASEMENTS

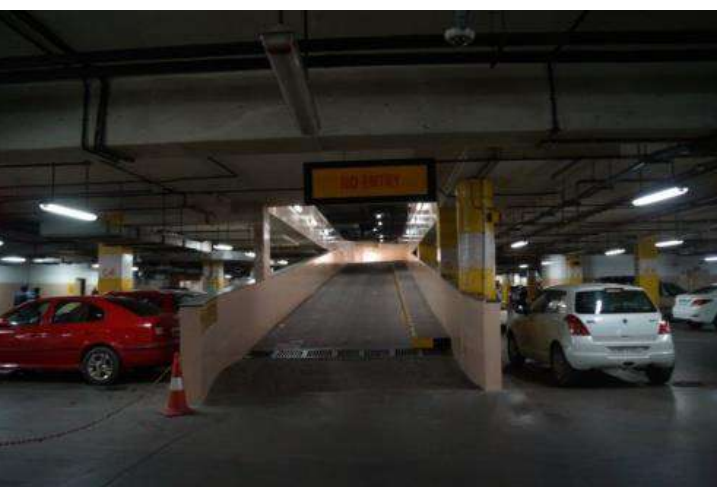
- 1300 cars can be parked in 3 different floors of basement at one time.
- Basement 1- Offices, Parking for 370 cars, Loading & unloading area, Garbage disposal area.
- Basement 2- Parking 470 cars
- Basement 3- Parking 270 car
- Basement height- 3.5m
- Grid 6mx6m
- There were two separate entries which were connecting to the parking, from ground floor.
- One was used for general entry of cars & The other was used by service vehicles.
- There were 4 lifts which were connecting basement to upper floors.
- Toilets and locker rooms Provided for the drivers.
- Signage are clearly marked in the basement.
- Throughout the basement, fire fighting equipment's like sprinklers, Fire hose reel, Fire extinguishers were present.



Electronic board



Basement Parking



Ramp in basement



Power Transformer area



Case Study 2- SELECT CITYWALK

BASEMENT SERVICES

- A.Fire fighting equipment's
- B.Emergency exits
- C.Loading & unloading area
- D.Garbage Collection area



Fire Hose Reel



Service lift connecting basement to upper floors.



Goods were delivered & stored first to basement, & Then it goes to upper floors.

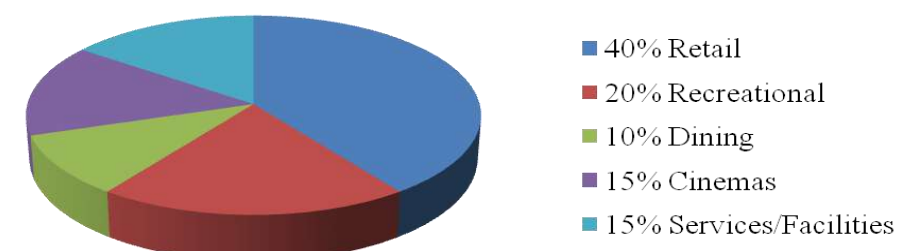


Sprinkler provided in all basement



Main Ups Room

BUILT & OPEN SPACES



Total Area With Basements =

91623.807 Sq.m

Basement Area = 41578.5(3L VLS)

ATRIUM

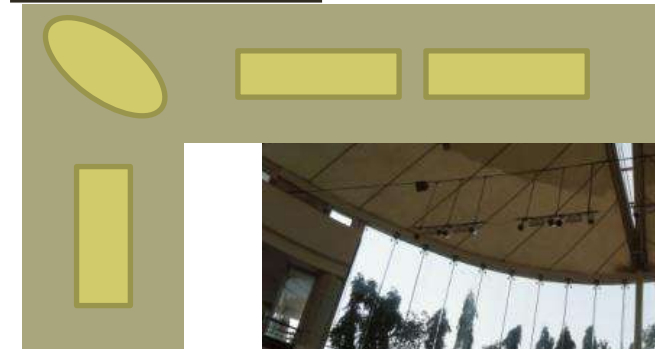
- Oval shaped Atrium present at the entrance of Mall.
- Atrium covered with light membrane sheet of polycarbonate.
- Around the atrium, Shops are located.
- Linear shaped atrium are located in between the mall.
- Sky light of atrium is made from poly carbonate sheet with glass panels



ATRIUM



SKYLIGHT



Oval shaped Skylight- Glass panels around oval shaped atrium.



Linear Shaped Skylight- Running all along the mall. Covered with same material as atrium. Linear Skylights.

STORES

- Area to stores were assigned as per their requirements.
- Floor to floor height-4m
- Stores equipped with fire fighting equipment.
- Internal layouts varies individually.
- Shops area ranges form 50 Sq.m-1500sq.m



FOOD COURT

- Food court is provided on second floor .
- Outdoor seating is also provided.
- Total seating capacity is more than 200 persons.
- Seating arrangement is according to food stalls to minimize the travel distance.
- ATM facilities are also provided within food court



INDOOR &

OUTDOOR



LANDSCAPING

- Comprises of 4 acres of outdoor open plaza, for art exhibitions & performances.
- Landscaped plaza of 8992 sq. meters.
- An OAT, with a capacity of 200+ people.
- Staircases leading to basement.
- Statues & Sculptures were placed all around the landscaping.
- Flooring: Marble, Granite Slabs & Vitrified Tiles



Landscaping



Water Feature & Sculpture



Grand Front Entrance



Sitting space around trees



View of OAT Area-15x5m Tread- 750mm Riser-300mm



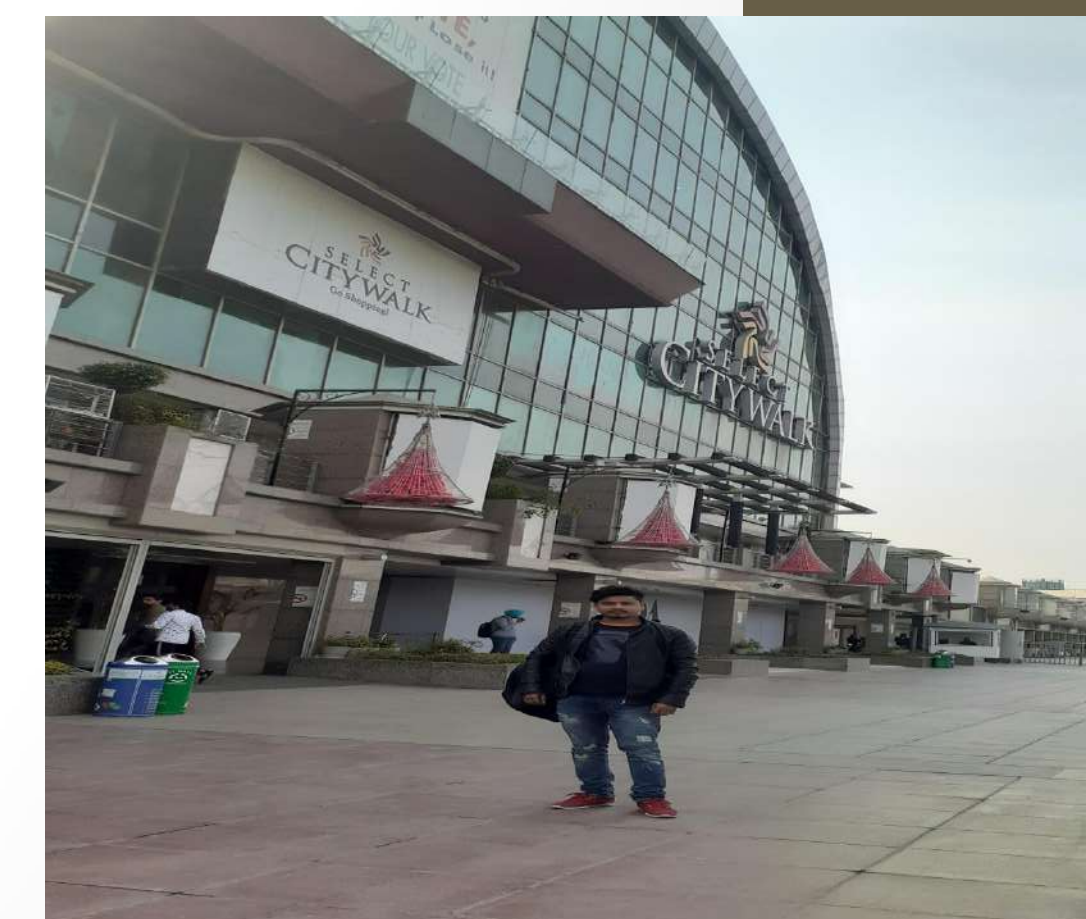
Landscaping



Fountain



Plaza



Case Study 2- SELECT CITYWALK

PVR CINEMA

- Size of plot 36x36m(G+2)
- Multiplex consists of **six** cinemas
- 2 - Gold class
- 4 - premier class.

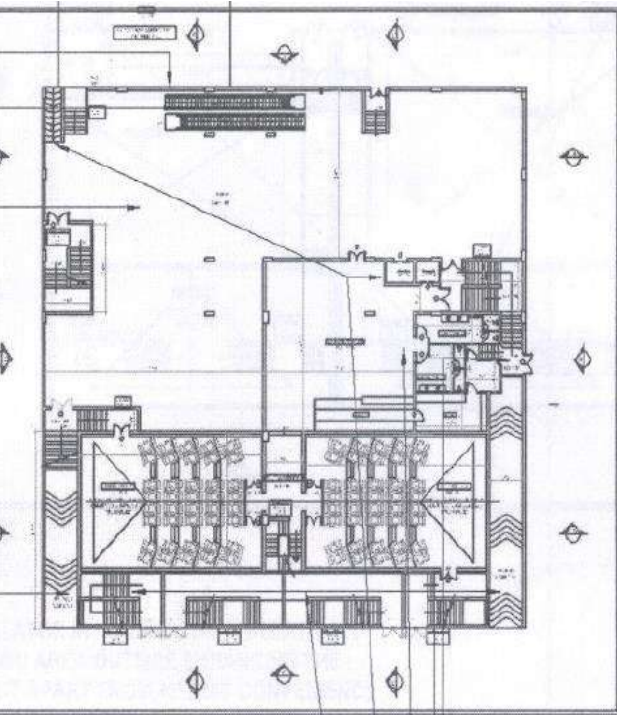
Main entry is through a bridge which connects the cinema & mall building from first floor.

- 1.5m wide staircase
- Gold class capacity- 40
- Premier class capacity- 420, 370, 120
- Tickets for cinema can be purchased from ground floor & first floor
- Landscaped plaza of 8992 sq. meters.
- Good point is ticket contour is just at the entrance of the mall.
- Parking for cinema is same as for Mall.



Ticket counter at Ground & First floor

MULTIPLEX



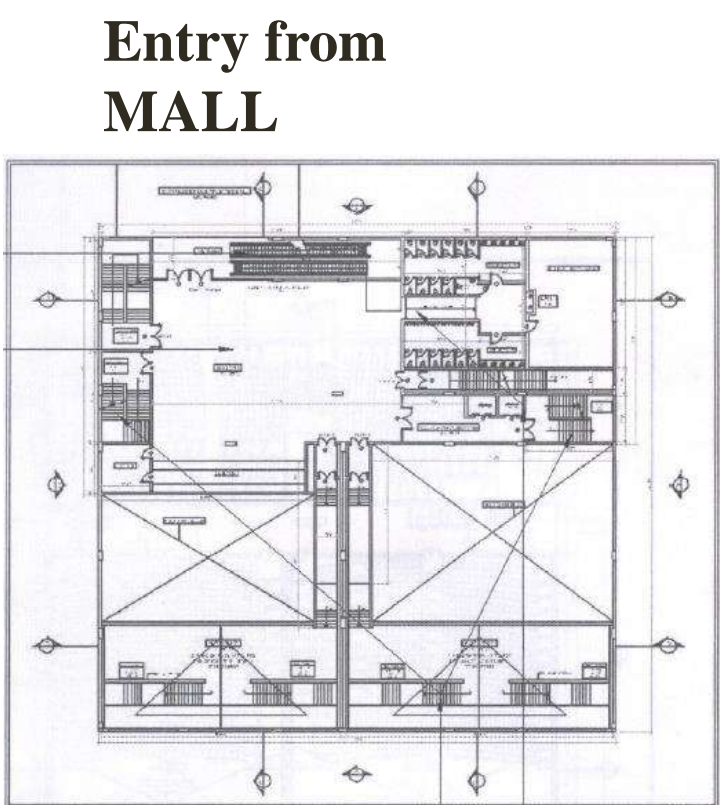
GROUND FLOOR PLAN

- Curtain glazing on north side.
- Staircase to help In evacuation in case of fire emergency.
- Area Dedicated To Food Court
- Harsh south/southwest sun is dealt with by giving a buffer space(ramp)
- **2 Gold class Cinema Hall.**
- **Capacity 40 persons.**

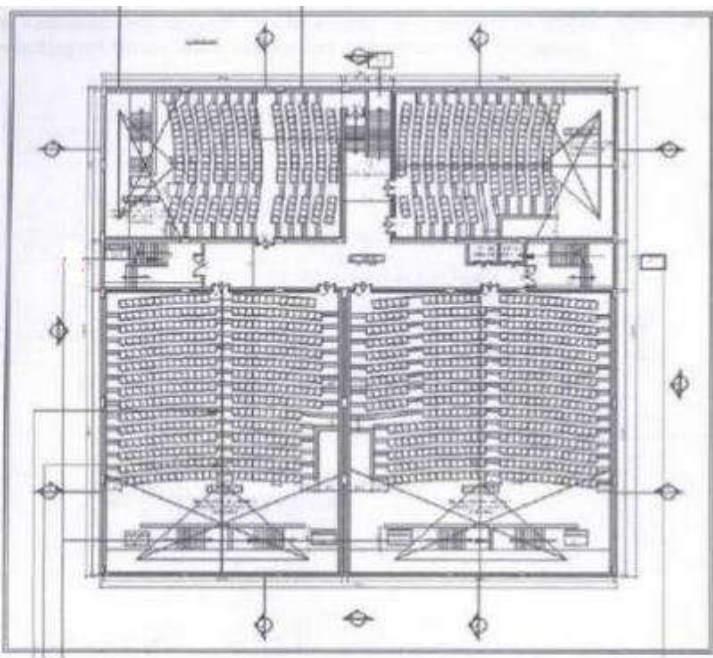


KEY PLAN

Bridge connecting Mall & Cinema



FIRST FLOOR PLAN



SECOND FLOOR PLAN

ENTERTAINMENT ZONE



EXTERNAL FINISH

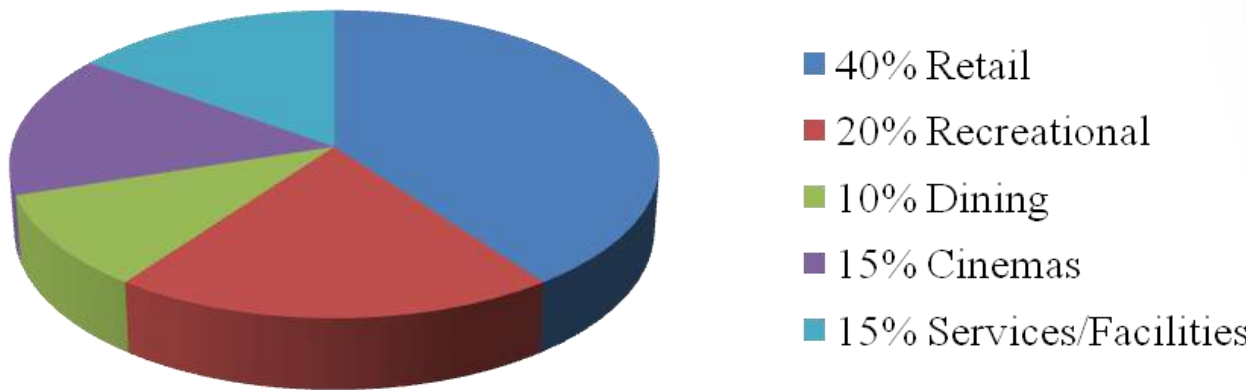
- The entire complex is finished with combination of
- Granite
- ACP cladding
- Acrylic paint
- Structural glazing

THESIS 2019-20

- At the upper level on the front facade, space has been provided for
- Advertisements
- Forthcoming attractions
- Cinema posters
- which are visible from a distance

governing the external elevation.

BUILT – UNBUILT RELATIONSHIP



- Three floors of shopping area
- Two separate five storey blocks containing
- a. Office space
- b. Serviced apartments
- Outdoor open-air plaza
- Water bodies and green lawn
- Amphitheater
- PVR cinemas



Sky line view showing built-unbuilt relationship

STRENGTHS

- a. Being a high end commercial complex the grand plaza in front make it accessible to diverse segment of people.
- b. Hierarchy and strong interrelationship of spaces plaza corridors atriums shops.
- c. Excellent servicing by rear side service lane and service corridors along the back.



Case Study 2- SELECT CITYWALK

WEAKNESS

- a. Do not provide unbiased opportunity.
- b. No scope for informal shopping.

CIRCULATION

- Linear Pedestrian movement inside the project.
- Circulation along atrium.
- Street corridor circulation on first floor with small shops and sitting area.

ENTRANCES

- There are two main entrances to the mall.
- One from the front and second from the rear side.
- On the front side, four main entries were present.
- Passage Running on one side of L-shape building, 1.2.5 m wide
- 2. Distance between columns 6m
- 3. Column size 600x450 mm



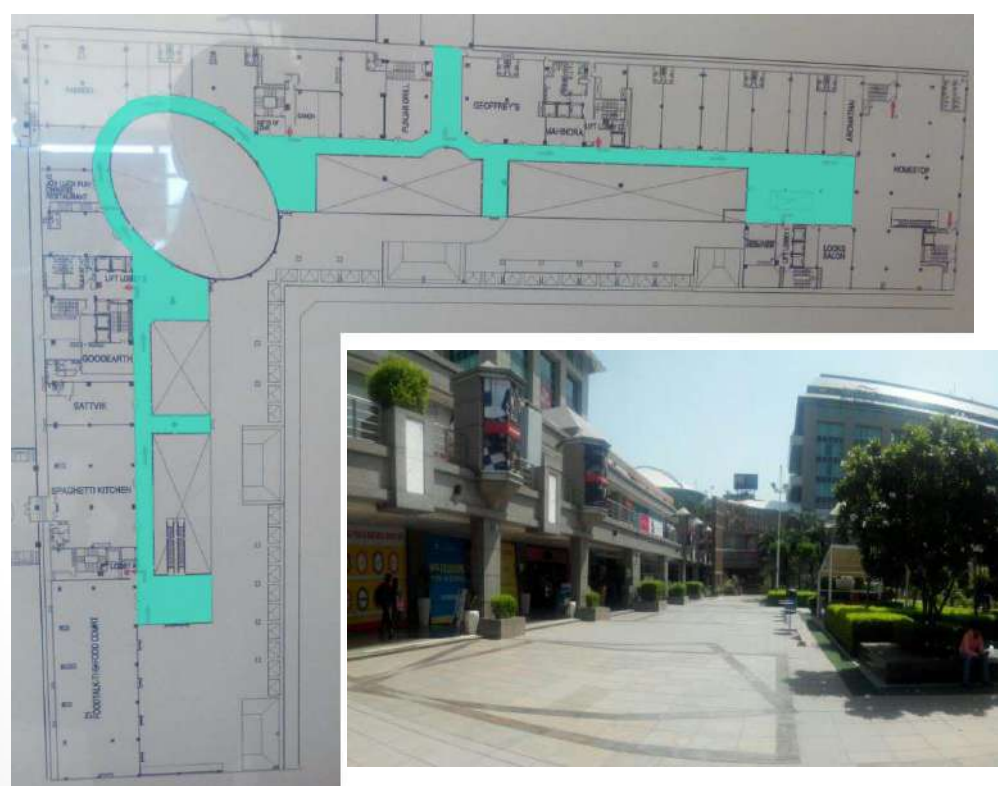
GROUND FLOOR PLAN



FIRST FLOOR PLAN



STREET SHOPS



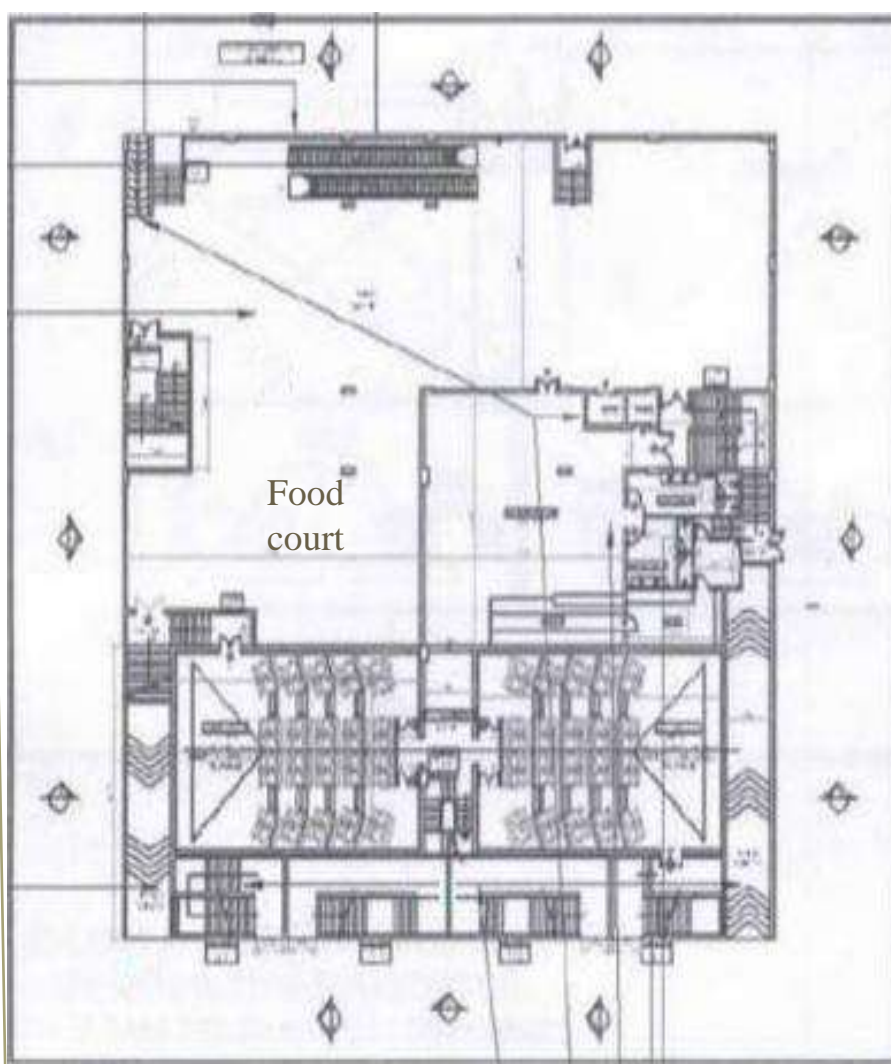
SECOND FLOOR PLAN



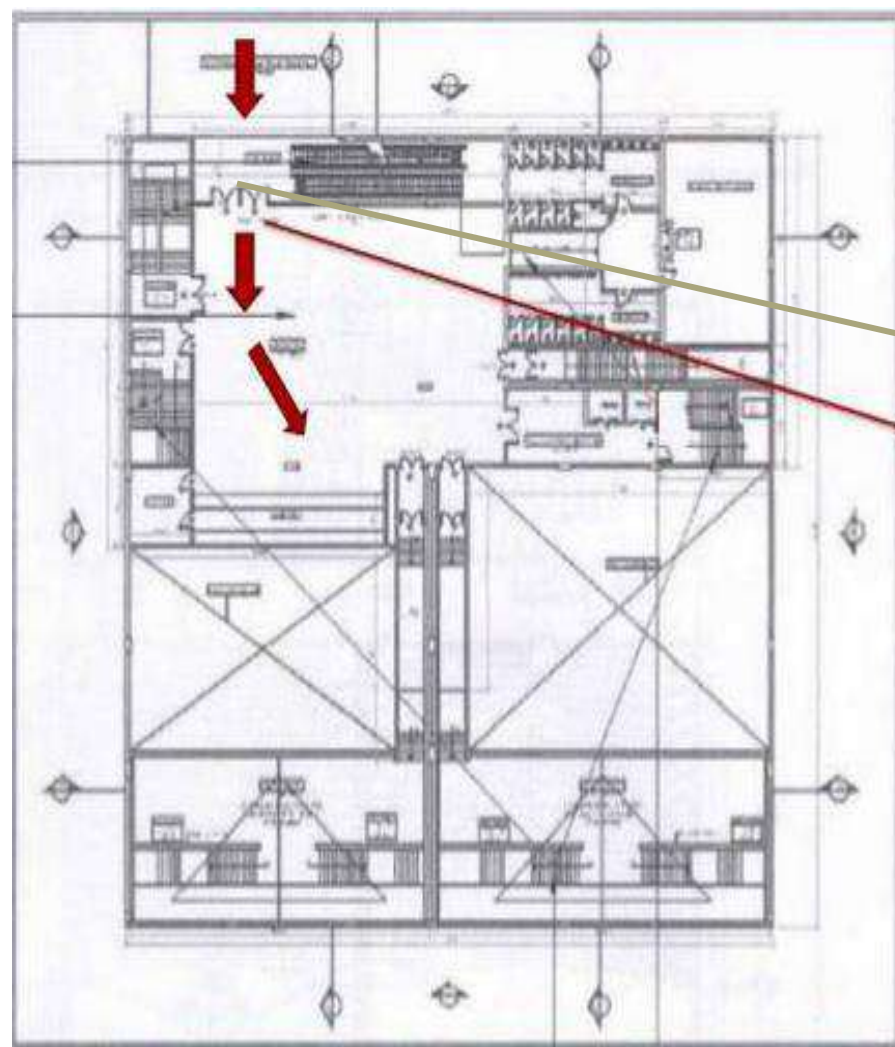
SMALL SITOUT ON STREET

MULTIPLEX

- Consist of six cinemas.
- Two Gold class cinemas.
- The ground floor entry is utilized to give the entries to Gold class and the cinema above.

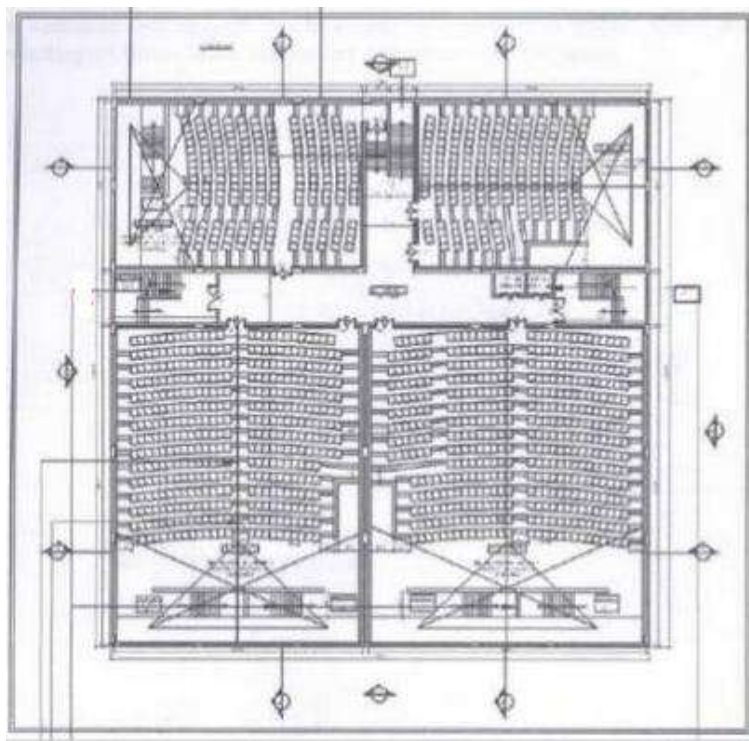


GROUND FLOOR PLAN



FIRST FLOOR PLAN

- The main entry is through a bridge which connects the cinema and mall building on first floor level.
- The ground floor entry is utilized to give the entries to Gold class and the cinema above.



SECOND FLOOR PLAN

- Four Premier cinema halls are provided in second floor.
- Having capacity 420. 370 and 120

PARKING

- Major parking is in basement with parking entrance at front and rest of is circulation is pedestrian.
- 1300 cars can be parked in three different floors of basement at one time.
- First basement
 - I. Offices, parking for 370 cars, loading and unloading area, garbage disposal area.

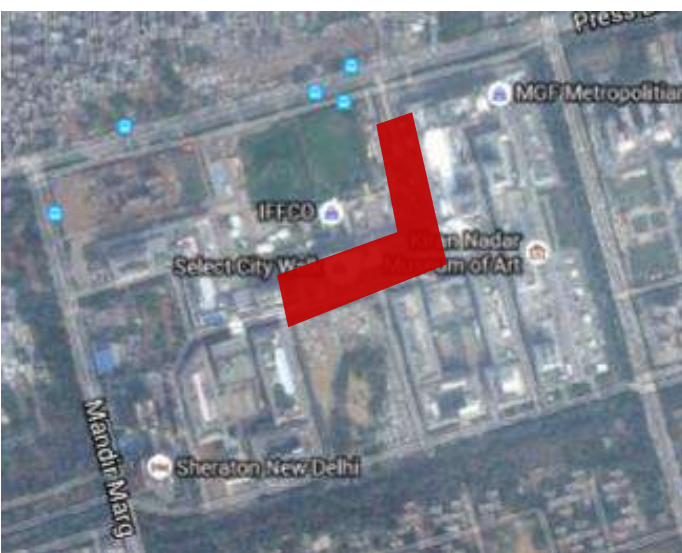
- Second basement –space for 470 cars
- Third basement – space for 270 cars
- Basement height is 3.5 m
- There are two separate entries which are connecting to the ground level. One is used for public entry and other for service vehicles.

SERVICES

- Two Entries and five fire exists are provided.
- Three level basement parking are provided.
- The placement of the entrance to the basement is such that it also acts as a drop off without hindering the basement entry.
- Three escalators are provided at every atrium.
- Service corridors are also provided at the rear side of the City Walk.
- A 20 m service lane is provided at the back which also serve the purpose of surface parking.

SITE CONTEXT

- ❑ Bus stop – Khirki village
- ❑ Malviya Nagar metro station-1 Km
- ❑ IGI airport – 15.6 Km
- ❑ DLF place mall – 200 m
- ❑ MGF metropolitan mall – 100 m
- ❑ Qutub minar - 3.7 Km



View showing linear rectangular form of mall



View showing open plaza

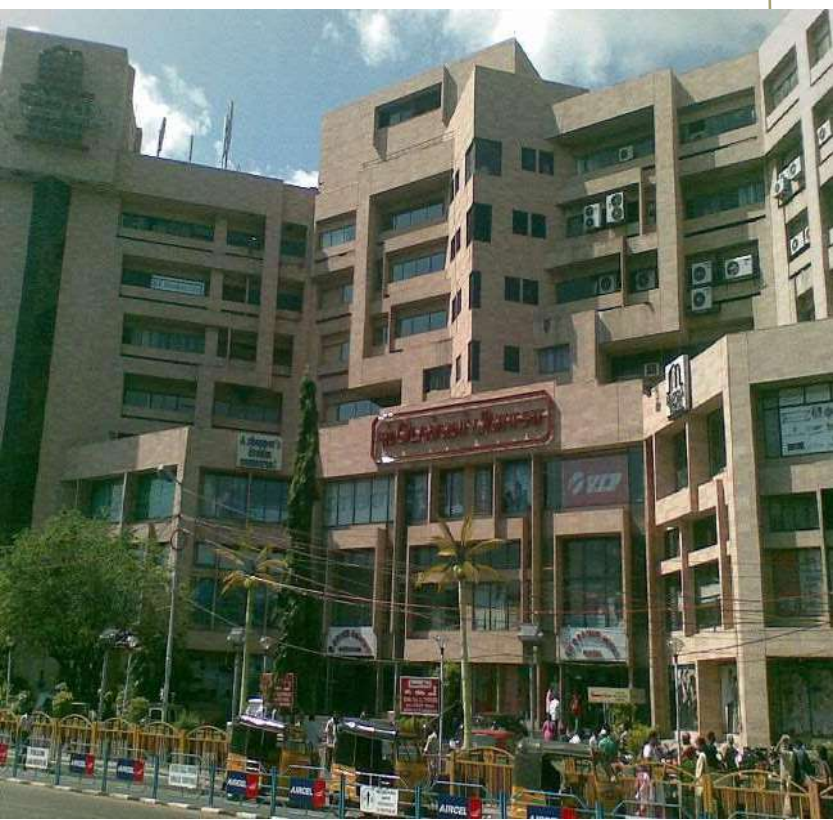


Arial view

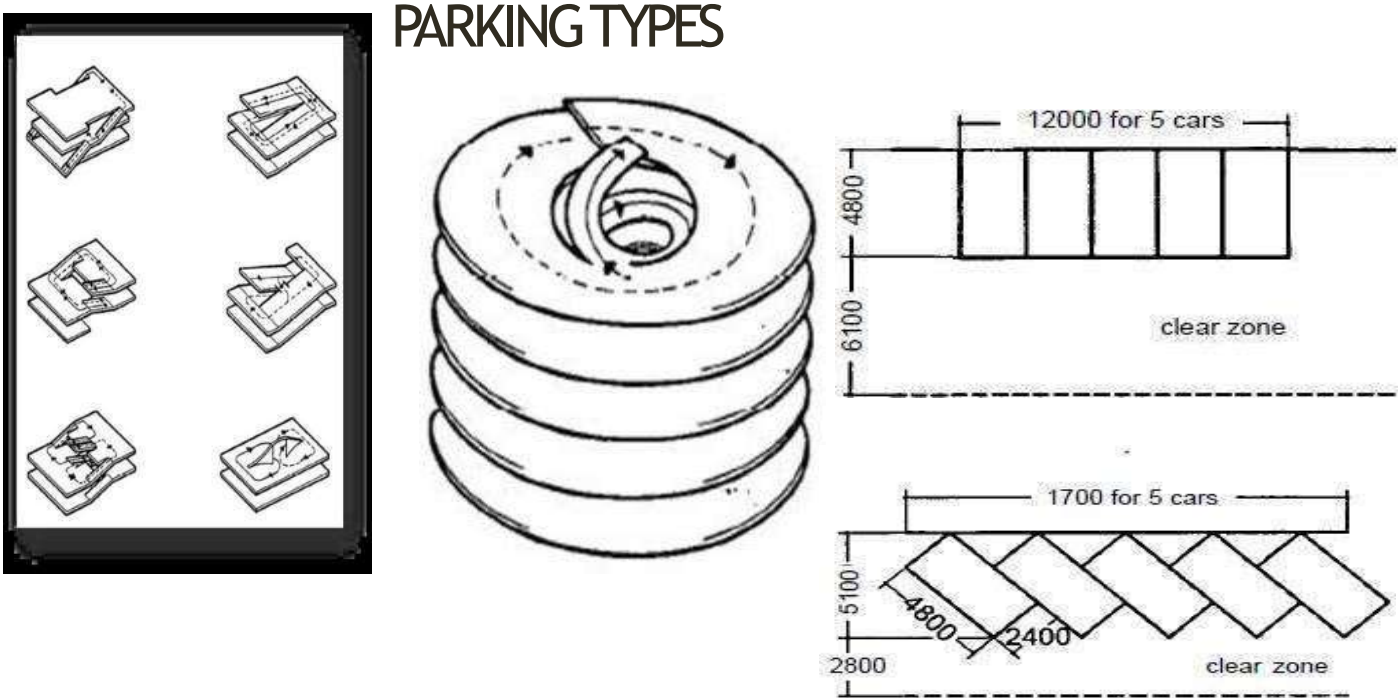
LITERATURE STUDY I- SPENCER PLAZA CHENNAI

First shopping mall in India...

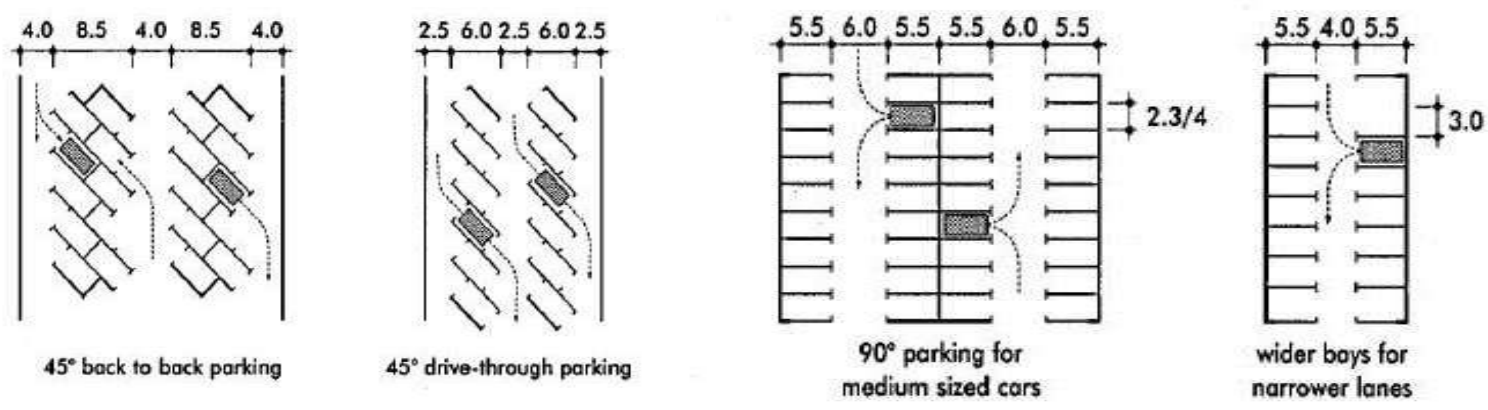
- Type – shopping mall and commercial offices.
- Architectural style – Modernism.
- Location – anna salai, chennai, INDIA.
- Constructed started – 1863.
- Total floor – 8.
- Floor area – 1,068,000 sq ft (99,000 sq m).
- ARCHITECT – C.R. Narayana Rao & co.
- Developer – Mangal tirth.



For parking in open spaces, the minimum required setbacks (except front) to be left around the building with adequate vehicular access, aisle, drives, ramps, required for maneuvering of vehicles.



PARKING LAYOUTS FOR ANY PUBLIC BUILDING



COLUMN SPACING

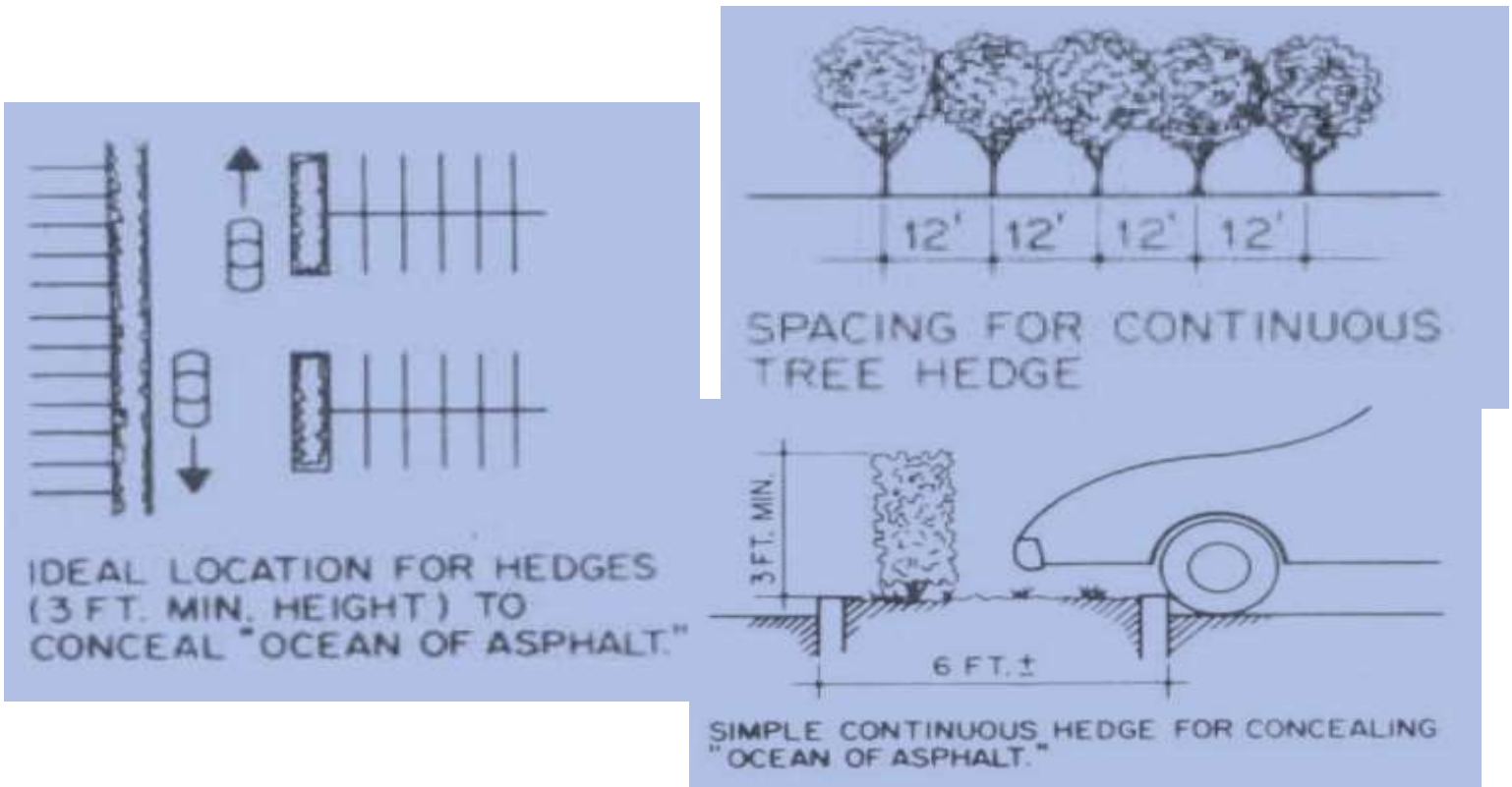
- Significant dimension is along the mall as this involves the widths, i.e. , frontages, of stores.
- Often used spaces are 20, 25 and 30 ft., With the last the most flexible

STORE DEPTHS

- Buildings are usually 120 to 140 ft deep, sometimes more to accommodate larger stores
- If there are basements or mezzanines, the depth dimension usually can be reduced 20 to 25 percent

PARKING AND TRAFFIC

- A ratio of between 5 and 6 car spaces per 1,000 sq. ft. of leasable store area is mandatory.

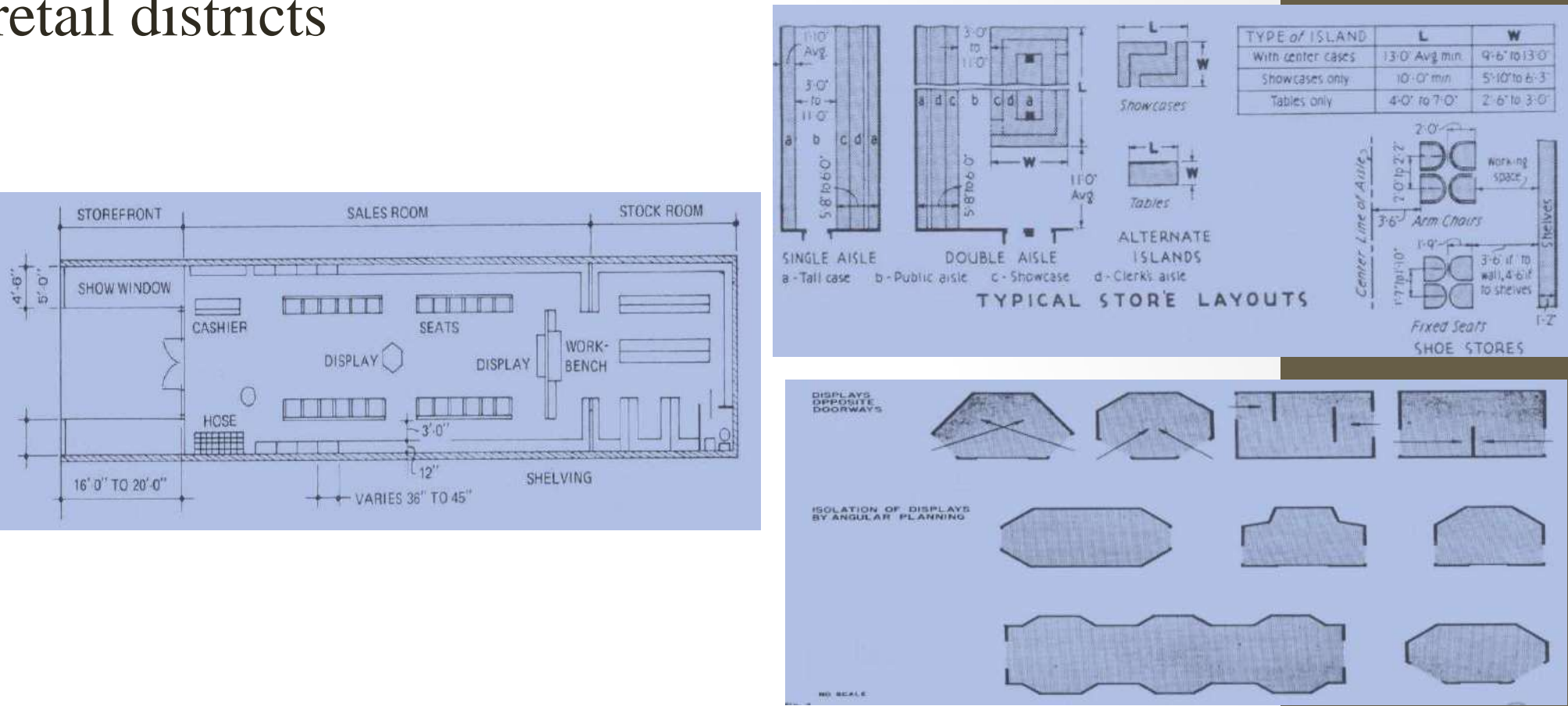


THESIS 2019-20

SHOP SIZES & LAYOUTS

- 12 to 15 ft wide by 50 to 60 ft long in large cities ; and 15 to 18 ft. wide by 60 to 80 ft long in smaller cities .

These dimensions apply particularly to shops in 100 percent retail districts



1.Structural models	Width (m)	Notes
Small shops	5.3 to 6.0	Mostly 5.4 m Depending on beam depth. Single-storey buildings –larger spans
Large-space users	7.3 to 9.2	

type	sales area	sales:ancillary area
small shops	(less than 280 m2 sales area)	45:55
Department stores	10000-20 000 m2	45:55.
Variety stores	500 to 15 000 m	50:50
Supermarkets	The sales areas of large-space users range from 1000 to 2500 m2	60:40,
Superstores	5000 – 10 000 m2 of selling space.	
Hypermarkets	at least 2500 m2 sales floor	60:40,
Shopping centers	25 000 and 50 000 m2 GLA	
Retail parks	at least 4500 m2	

PLANNING GUIDELINES

CIRCULATION:-

Occupancy	Area per person (m2)
Assembly halls (closely seated)	.46 @450mm c/c movable seats .60@500mm c/c fixed seats
Dance halls	.55 to 0.90
Restaurants (dining areas)	.90 to 1.1
Retail shops and showrooms	4.6 to 7.0
Department stores, bazaars	0.9 (including counters, etc.)
bargain sales areas	0.46 (gangway areas only)
Offices	9.3 (excluding stairs and lavatories)

Flow capacities of corridors

Occupancy	Area per person (m2)
General design purposes	0.8
People moving at good walking pace (1.3 m/s)	3.7
People moving at a shuffle (0.4 to 0.9 m/s).	0.27 - 0.37
People at a standstill due to obstruction	0.2

Rain Water Harvesting

- Since June 2001, the Ministry of Urban affairs and Poverty Alleviation has made rainwater harvesting mandatory in all new buildings with a roof area of more than 100 sq m and in all plots with an area of more than 1000 sq m, that are being developed



Rain Water Harvesting tank

SETBACK

REQUIREMENTS OF MULTIPLEX

Height of the Building (in m.)	Minimum front open space (in m.)	Minimum open space on remaining sides (in m.)
(1)	(2)	(3)
Up to 15		6
Above 15 & Up to 21 mt.		7
Above 21 mt. & upto 24 mt.	12	8
Above 24 m & up to 27 m		9
Above 27 m & upto 30 m		10
Above 30 m & up to 35 m		11
Above 35 m & upto 40 m		12
Above 40 m & up to 45 m	13	13
Above 45 m & upto 50 m	14	14
Above 50 m	15	16

S	PARTICULARS OF BUILDING	MINIMUM PRESCRIBED
1	Height of each floor	2.9m
2	Details of street abutting the building	
	a. Commercial - 1000m	12m
	b. Above – 1000 sq. m	18m
3	Width of entrance to premises	4.5m
4	Stilt floor height	2.5m
	Head room height	5m
5	Basement area with dimensions	
	a. Width of exit	3.6m
	b. Width of entrance	3.6m
	c. height	2.5m

ENTRANCE & EXIT.

Suitable means of entrance and exit which shall not be :

- Less than 5m width and 2.5m in height for
- use of the public and, to access of the fire
- fighting vehicles in the road frontage

PARKING SPACE

The parking may be provided in

- basements or cellars or
- on stilt floor or
- in open spaces.

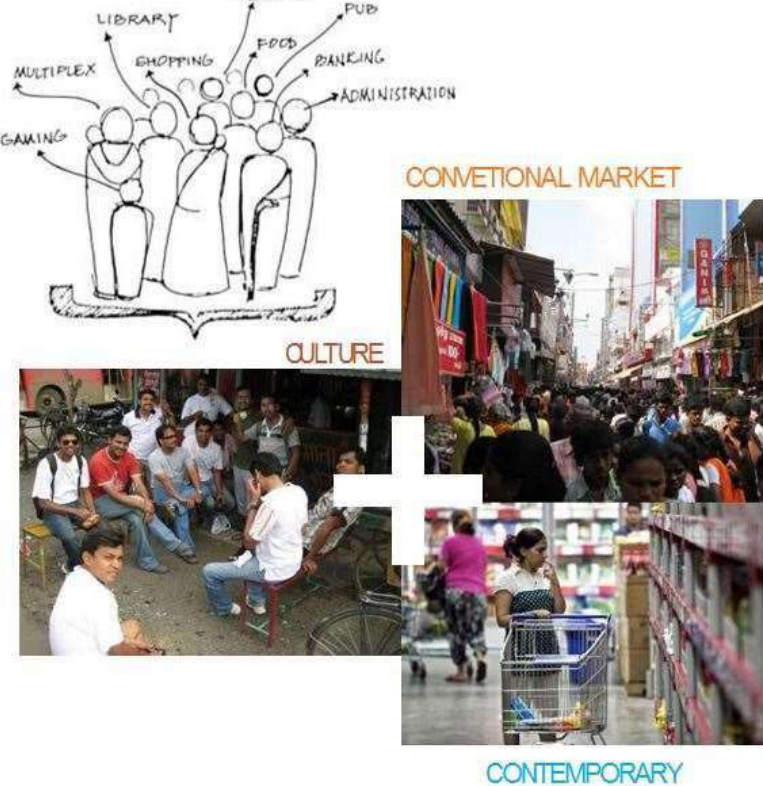
Types of buildings	Parking area to be provided as percentage of total built up area	
	In municipal Corporation areas	Other areas
Multiplex complexes	60%	50%
Cinema theatres	40%	30%

LITERATURE STUDY 2- city centre kolkata



AIM

. To create a space which can form the node for holding and experiencing commercial, cultural and social activities.
. It is in a way a hybrid between a Convention centre or a Cultural hub and a Commercial centres at a much reduced scale.
.As a City Centre requires to incorporate the demands the present demography asks for commercial and Cultural Hub.



LOCATION : KOLKATA, SALT LAKE

SALT LAKE CITY : Bidhannagar as it is popularly called, is a planned satellite town in the Indian state of West Bengal. It was developed between 1958 and 1965 to accommodate the burgeoning population



POPULATION

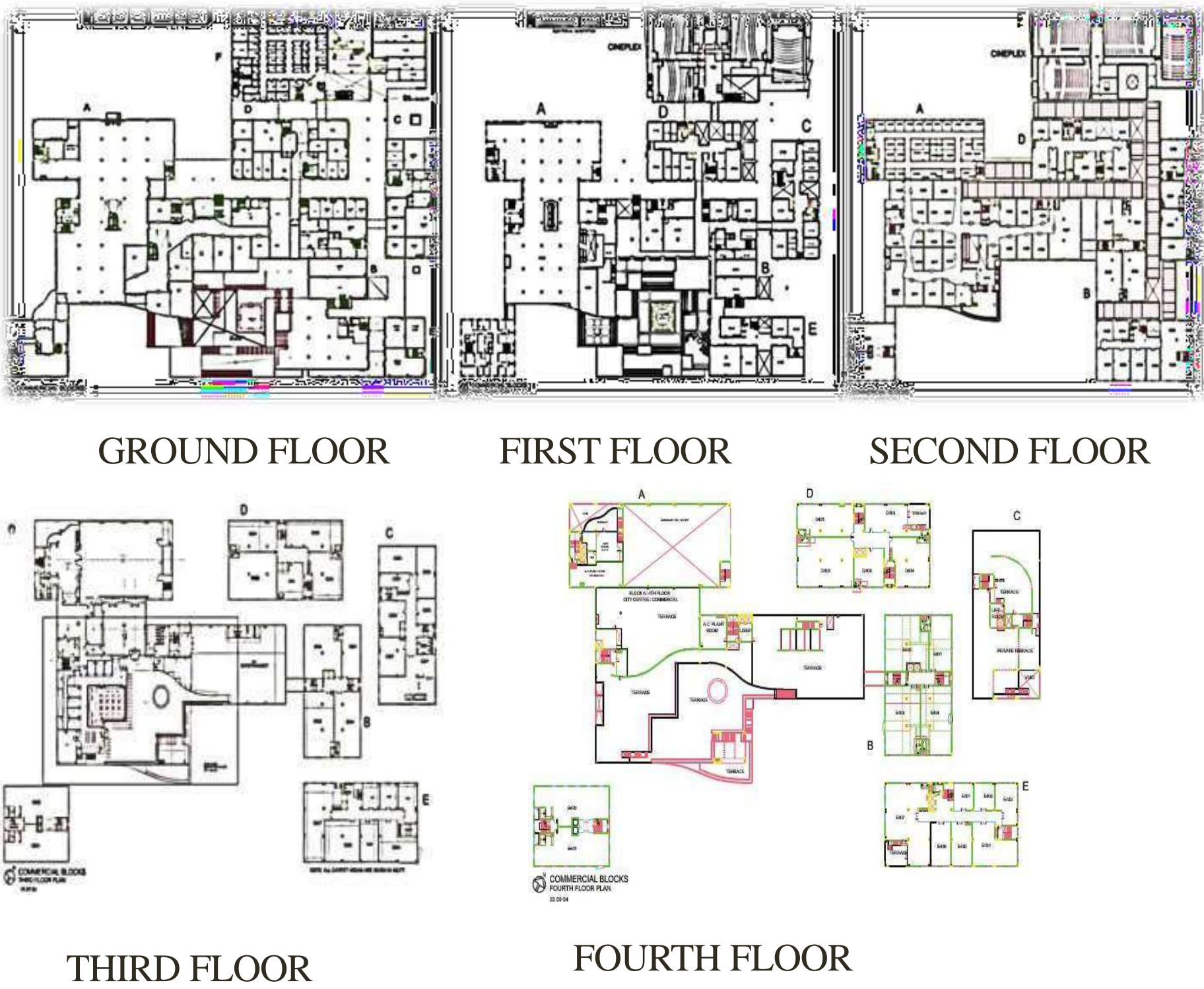
.At the 2011 census, Bidhannagar population of 218,323 (Males 111,363 ; Females106,960
Bidhannagar has an average literacy Of 90.44% (higher than The national average of 74%),[with male literacy 93.08% and female literacy of 87.69%.

SITE

CITY CENTRE , KOLKATA
ARCHITECT : CHARLES CORREA
SITE SPECIFICATIONS :

CLIENT – KOKATA MUNICIPAL CORPORATION
LOCATION - DC BLOCK , SECTOR – 1 , SALT LAKE CITY
AREA – 10700M
VEGETATION – SHRUB COVER + TROPICAL TREES
TOPOGRAPHY – 45mASL / NO CONTOURS
CLIMATE – HOT AND HUMID / 45°-12°/ PPT 154 CM

FLOOR PLANS

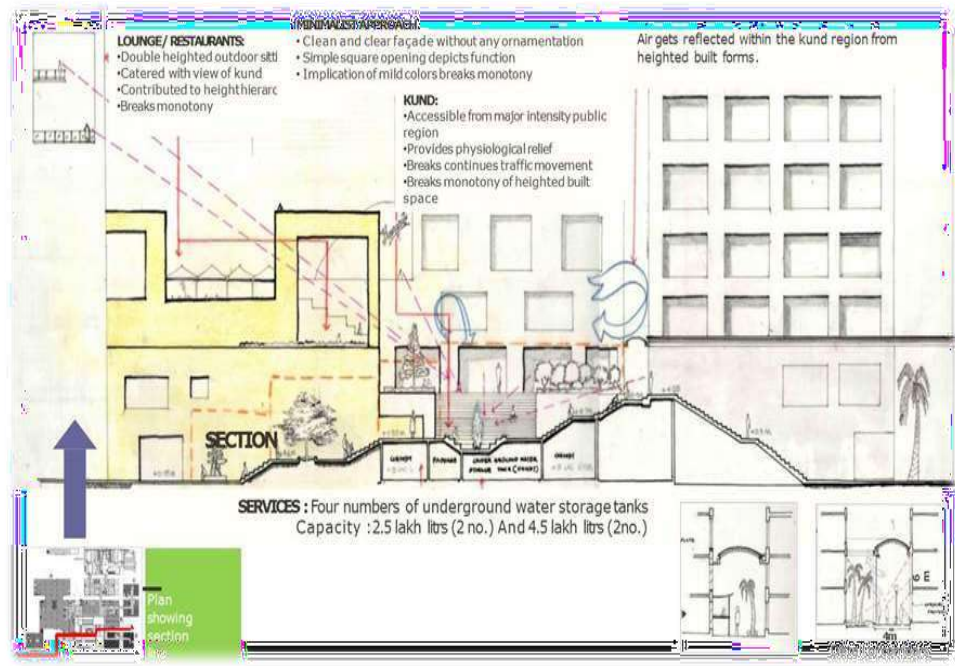


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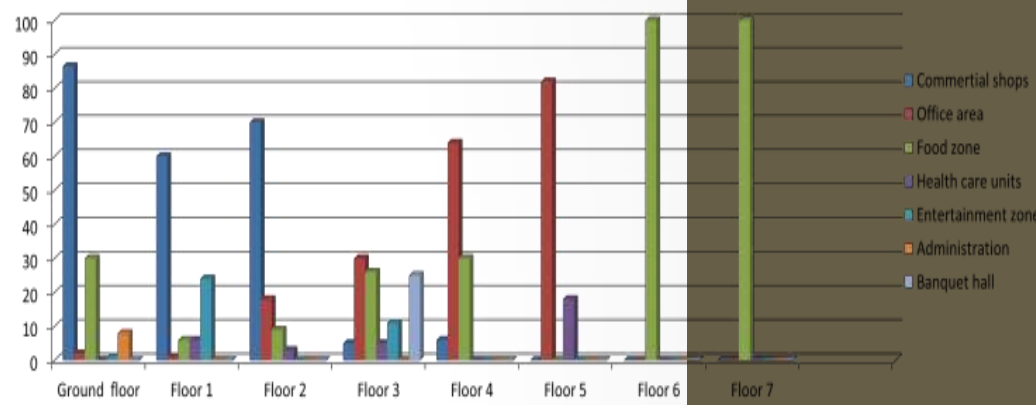
Observation •Openings on Southwest and Southeast direction to facilitate tunnel effect between blocks.
• Daytime;- Kund in southeast direction to have pleasing sun in
•The interlinking corridors facilitate constant air circulation and end at the Kund space.
• Road side;- The Kund space is provided on the longer axis of the site to have maximum exposure to the



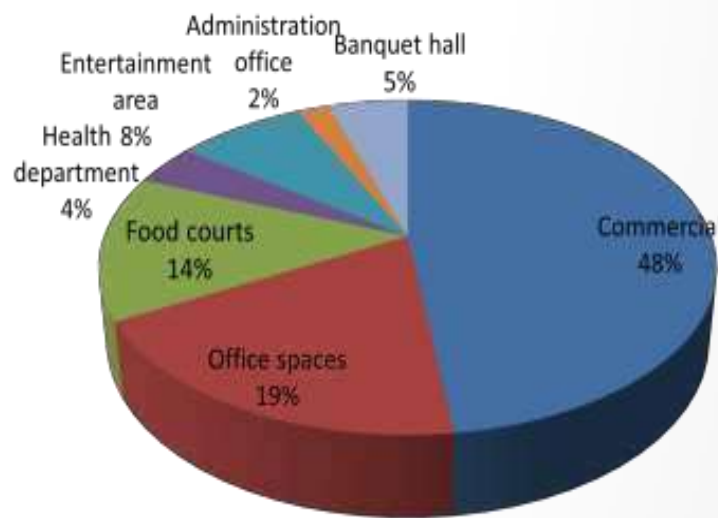
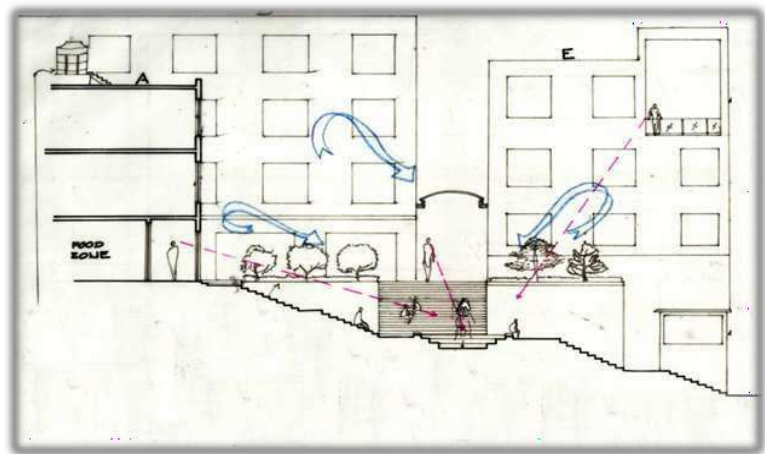
SECTION



INFERNCE



Some services like airconditioning, O.W.S tank are provided at the terrace



INFERNCE - (POSITIVE)

. The activities linked together by means of linking elements, which not only satisfies the function of activity ,but also provides visual connectivity creates harmony.
. Concept of conventional Indian marketplace in replicated.

NEGATIVE

. Obstructed servicing in staggered Planning blocking
. Not much scope for informal activities.

CLIMATE STUDY

Climate of Noida

Noida stretches **over** an are of 1483 sq. km. it stands in the middle of Indian sub-continent, between the Himalayas and Aravalli Range.

Dimensions – 33 miles wide and 30 miles broad.

Height above mean sea level - 213m to 305m

Earthquake zone – Zone 4

Noida lies in the landlocked Northern Plains of India. Its climate is greatly influenced by its proximity to the Himalayas and the Thar Desert, causing to experience both weather extremes. The climate of Delhi is an overlap between monsoon influenced Humid –sub tropical and semi-arid with high variation between summer and winter temperature and precipitation.

Temperatures

Summer- May is Noida hottest month during which the temperature may reach 45°C, or higher.

Monsoon- The temperature drop below 40°C, as humidity suddenly soars

Winter-The minimum temperature plunge to the vicinity of 0°C,maximum temperature stay under 20°C.

Autumn- Maximum temperature drop below 30°C by late October and there gradual fall in average temperature. Minimum temperature drop below 20°C.around late autumn difference between morning and afternoon temperature in a day becomes considerable.

Spring-Maximum temperature is 30°C and minimum temperature is 10°C.

Solar Radiation

Solar radiations are direct and strong during the dry period and absence of cloud permit easy release of heat through long wave radiation at night during hot months. Diffused radiations are present during dust haze period. Radiations during warm humid month are diffused but strong and cause sky glare.

Humidity

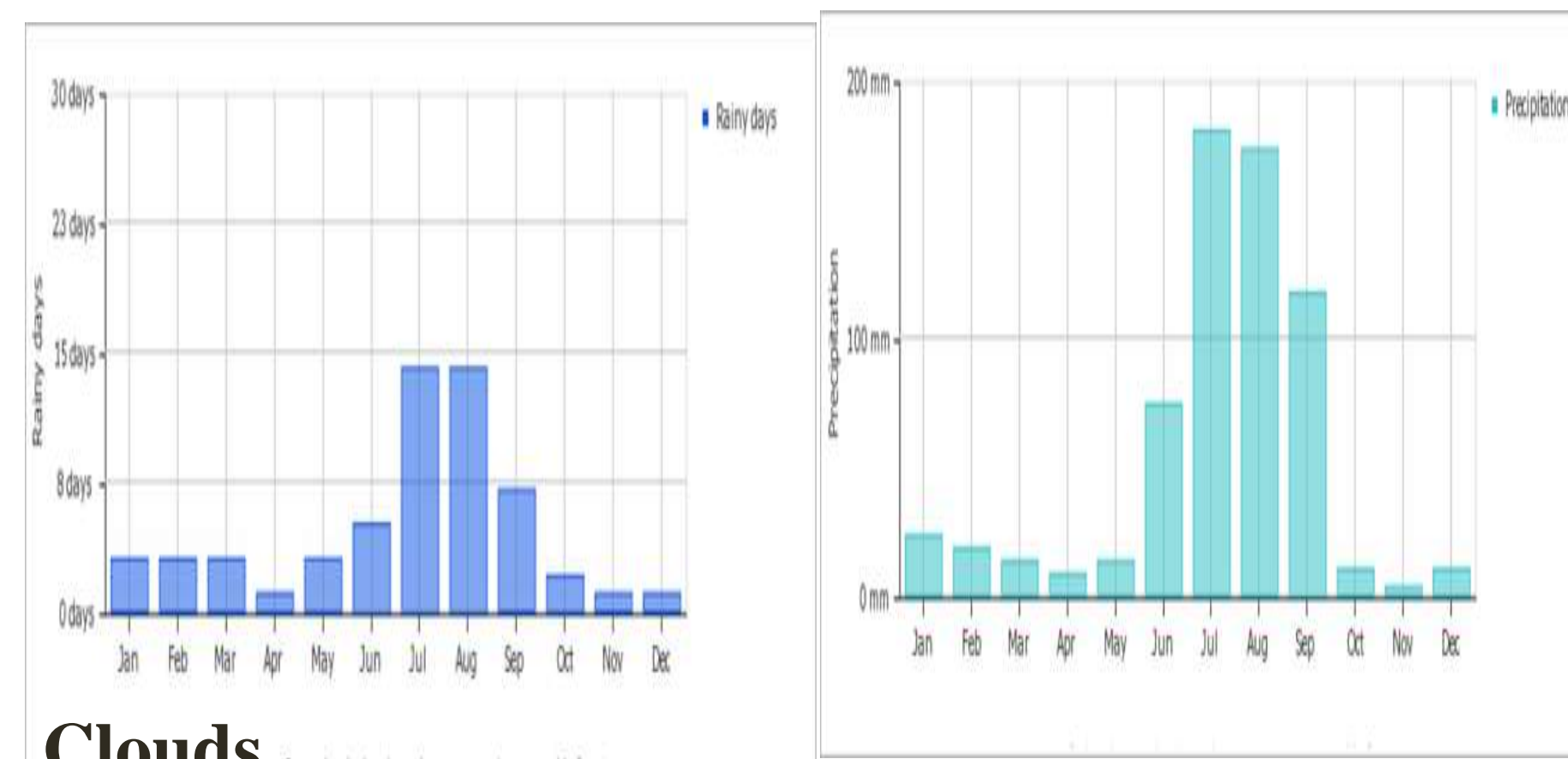
Summers are characterized by low humidity. Therefore the relative humidity is low throughout the dry period with value of about 20%-30% monsoon are marked by high levels of relative humidity as high as 80%.



Precipitation

The normal annual rainfall in Noida is around 611.8mm. About 81% rainfall is received during monsoon month of July, august and September and remaining in winter month caused by western disturbances. April is driest month with 3mm of precipitation.

August is Noida wettest month with average precipitation=246mm. By September the amount and frequency of precipitation drops. Monsoon ends by early October. It may rain towards the end of January.



Clouds

The skies are heavily clouded during the monsoon months. The skies are clear blue or lightly clouded in the remaining year and become bright with frequent dust hazes during the end of dry season. Dense cloud formation during monsoon. The cloudier part of year begins in May and clear part of year begins in September. Median cloud cover ranges from 2%-64%.

THESIS 2019-20

Winds

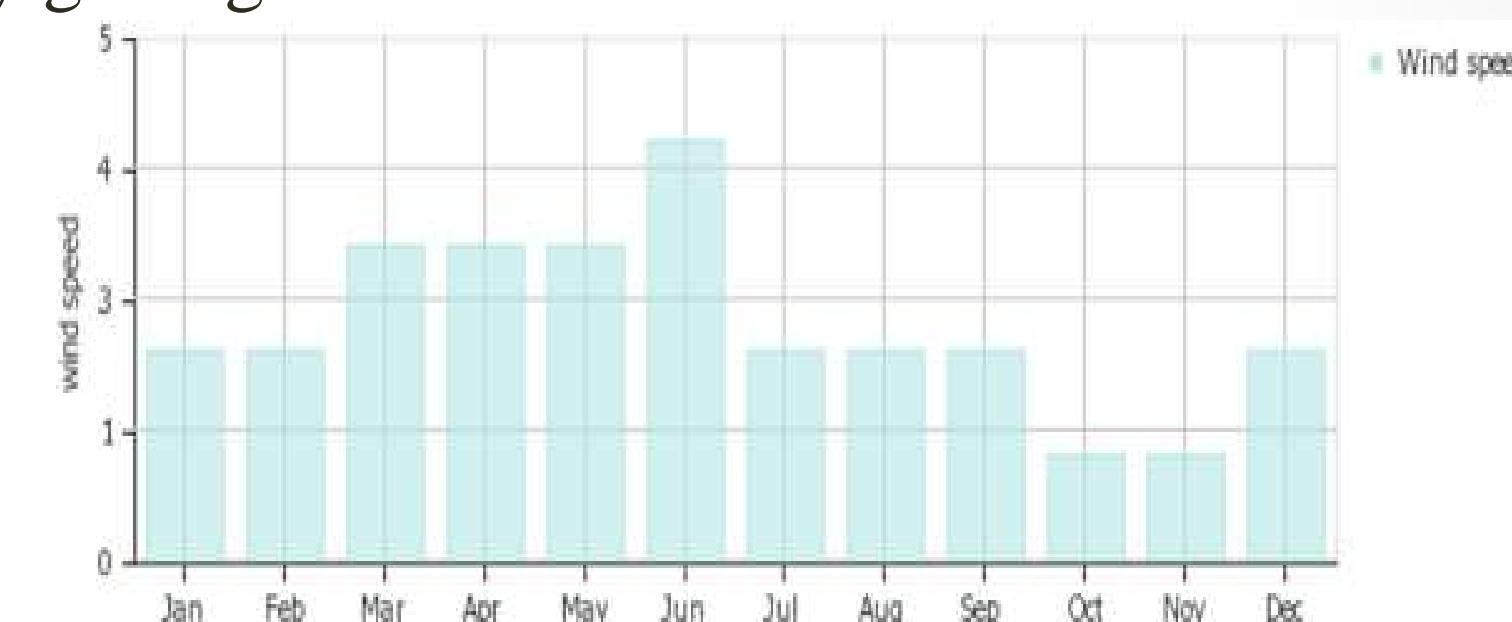
Summers are characterized by hot winds. There are no moisture laden winds dust storm can be severe and destructive when accompanied by strong winds. They make the surrounding appear pale yellow.

Monsoon winds arrive in Noida either end of June or first week of July. The arrival of moisture laden south-eastern winds marks the onset of monsoon.

During autumn wind direction begins changing from south-west and north-west.

Winters are characterized by chilly north-eastern winds from Himalayas blowing city makes the days feel colder.

During spring, the wind direction shifts to North-west. There by getting warm.



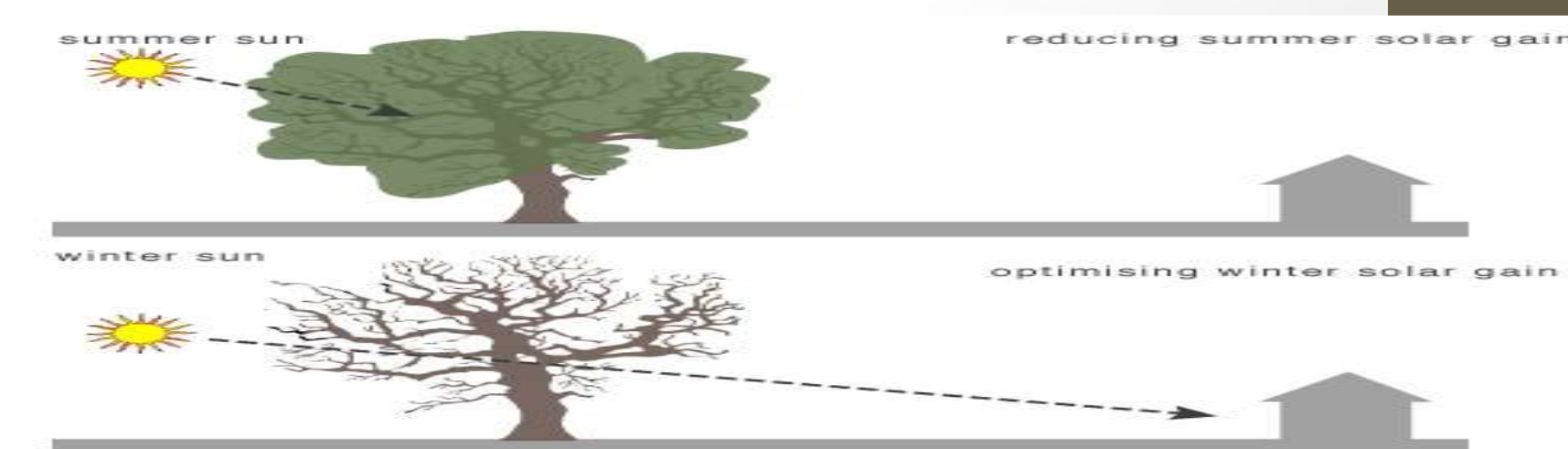
Inference

Orientation of building in Composite climate is generally in SOUTH-WEST and NORTH-EAST direction.

In this orientation, the walls will receive less solar radiation in summer and more solar radiation in winter in comparison to other orientations. This orientation minimizes the heat load in summer and is a very effective passive cooling strategy.

Vegetation

Locating densely foliated trees and shrubs to the South-West and west to facilities can reduce heat gain. Deciduous trees planted to the south, east and west of facilities will provide summer shade but will not block winter sun



SITE STUDY

INTRODUCTION:

The original basis for city center to form was the people's need to come together for different purposes including trade, exchange of goods, other services, specific resources, with their security etc. the essential factor was that activities required people to communicate. the city today represents the total environment of its inhabitant and provides for not only the functional requirement of food, shelter and housing but also encourage **interaction between people and their environment**. it provides huge place in which many facilities like entertainment, trading, offices, informative places, exhibitions etc. can exist.

The site is proposed for CITY CENTRE AT Noida, Sector 32 **NOIDA** is today, a concentrated centre of economic boom, be it in the service sector, retail sector, housing scheme developments or entertainment. NOIDA Is today a Commercial hub.

SITE INTRODUCTION

TYPE OF PROJECT : CITY CENTRE

LOCATION: AT NOIDA, SECTOR-32



NOIDA is taken care by New okhla Industrial Development Authority management. Noida is situated in the state of Uttar Pradesh in its district Gautam Budh Nagar. Noida is about 20-kilometre southeast of New delhi. It is bound on the west and south-west by the Yamuna River, on the north and north-west by the city of delhi, on the north-east by the cities of Delhi and Ghaziabad and on the north -east, east and south-east by the Hindon River.

SITE DETAILS

This is proposed site for the CITY CENTRE. The site is being constructed over the land provided by NOIDA

LOCATION : 32 SECTOR, PLOT NO BW-58 NOIDA

PLOT AREA : 43379 SQ. M

TOTAL FAR : 4.5

GROUND COVERAGE : 30%

FAR DIVIDED: MALL - 1.8 , OFFICE - 1.2 , HOTEL - 1.5

ADJACENT PROPERTIES : ANOTHER COMMERCIAL PROJECT WAVE CITY

75 MT. RIGHT OF WAY (NORTH EAST)

45 MT. RIGHT OF WAY (SOUTH WEST)

ANALYSIS OF

OFF SITE FEATURES

- >SITE SURROUNDINGS
- >ORIENTATION OF SITE
- >ROADS

OFF SITE FEATURES

- NATURAL ELEMENT**
- (EXISIING TREES, EXISTING STRUCTURES etc.**

>SITE SURROUNDINGS

>ORIENTATION OF SITE

>ROADS

-DENSE RESIDENTIAL AREA AROUND SITE.

-METRO STATION NAMED 'NOIDA CITY

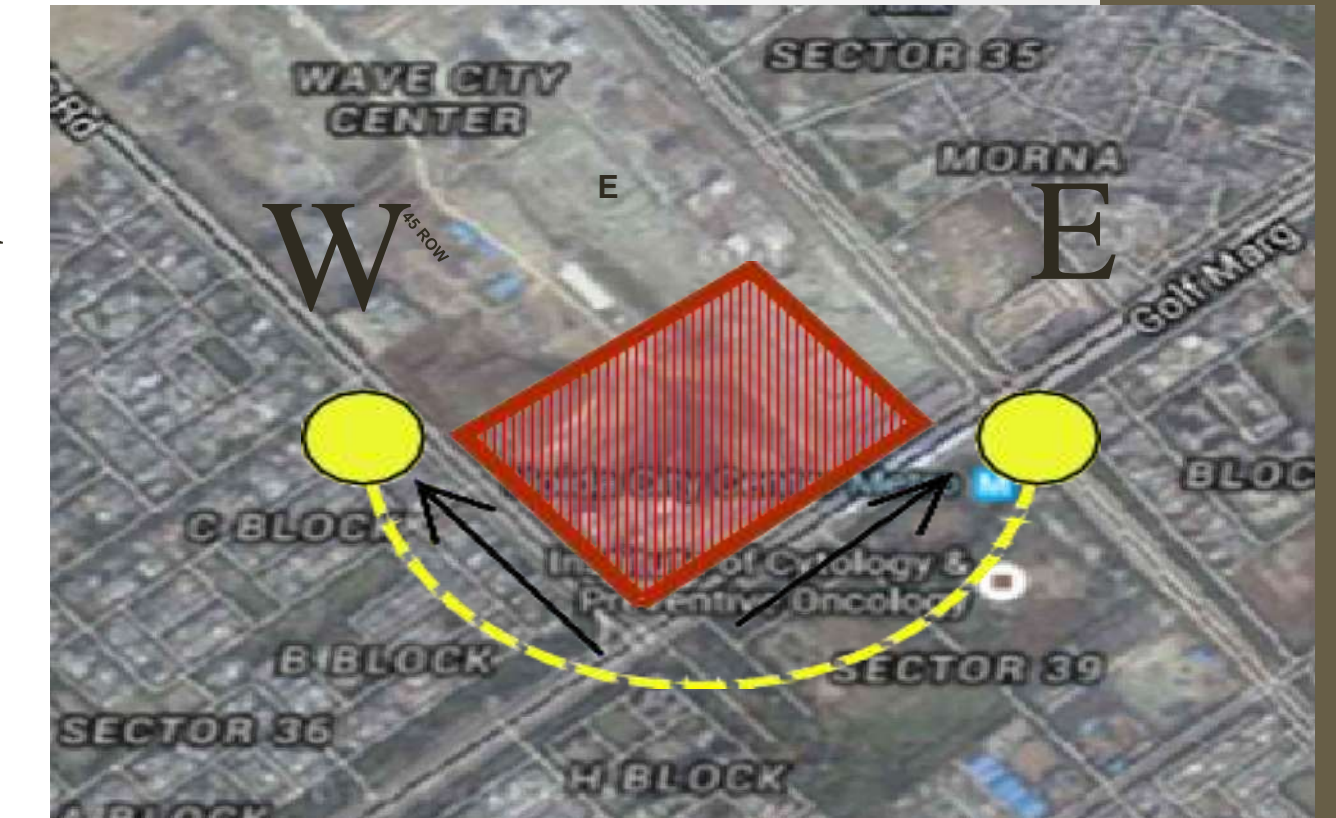
-CENTER' IS AT 200 M FROM SITE, SO IT IS

-EASY WAY TO COME FROM NCR AT THIS SITE.

-THE SITE IS WELL CONNECTED TO INFRASTRUCTURE

THESIS 2019-20

>ORIENTATION OF SITE



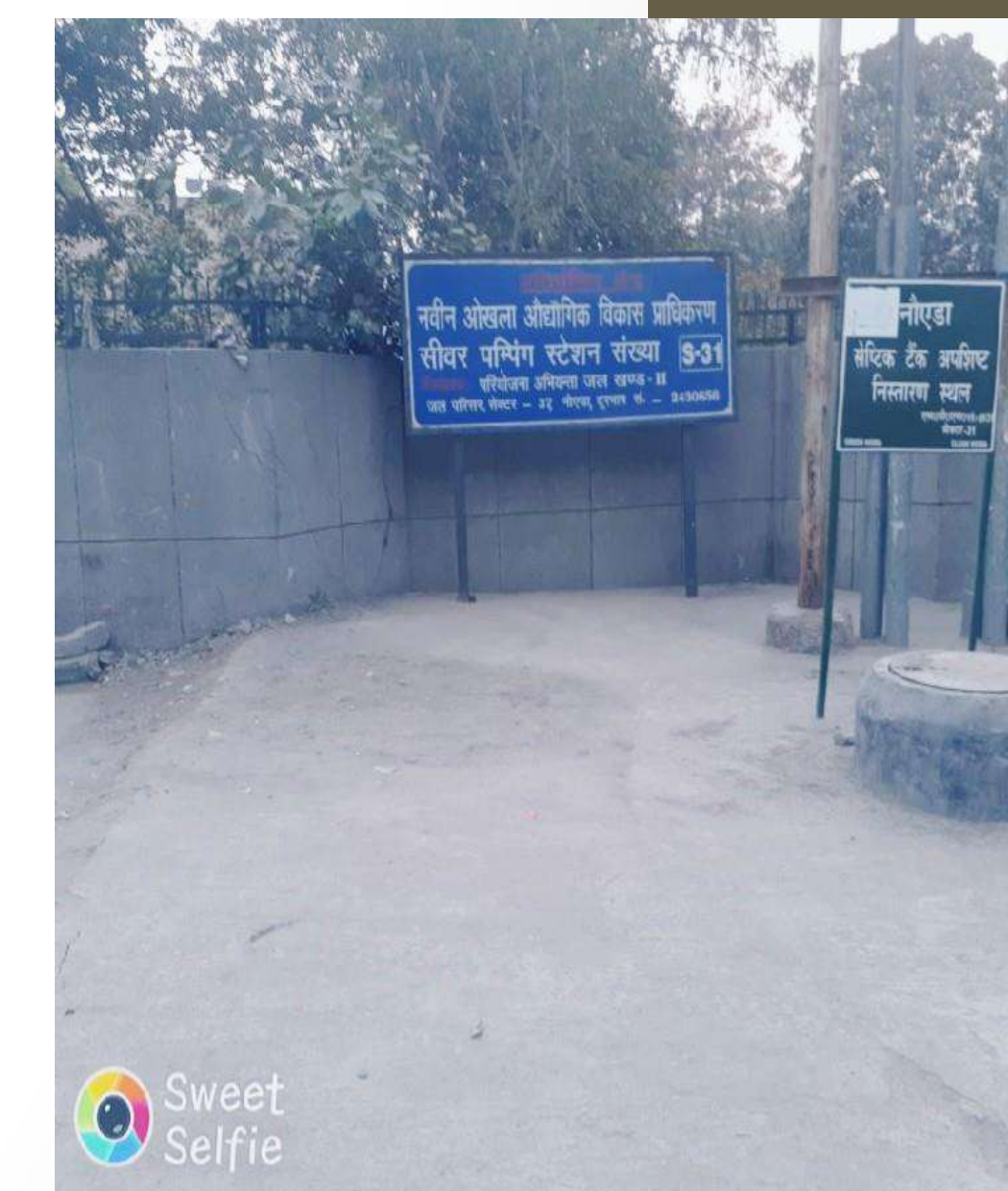
-Site is oriented like that its sharing two main roads, one is 75m row and other is 45m row.



TUBEWELL



SHAHEED BHAGAT SINGH PARK



SEVER PUMPING STATION SECTOR-31

SITE STUDY

PHYSICAL FACTORS

Soil type- Clayey soil with some proportion of sand. Bearing capacity 160 KN/m².

Topography – Almost flat with rough patches

Drainage – Natural slope towards Najafgarh Drain

Power Supply - The zone has two 220 KV sub-station and thirteen 66 KV substations.

Water supply:- Available and managed by tubewell from area to area

Climate

Mean maximum temperature in summer 41 degree Celsius

Mean maximum temperature in winters 4-6 degree Celsius

Wind speed – 10km/h

Direction in Summers SE to NW

Direction in Winters NW to SE



TUBEWELL



SEWER PUMPING STATION
SECTOR-31 (1 km. away from
the site)

CULTURAL FACTORS

Circulation – Transport facilities available in the form of public buses, Metro station and para transit

Land Use – Highly dominated commercial area which provide opportunities for their residents to interact. Swarn Jayanti Park is present adjacent to the site.

Utilities – Sewage is collected in different pump stations located in various sectors, sewer lines are available on site.

Visibility – Limited because of the construction of high rise buildings.

BIOLOGICAL FACTORS

Vegetation – Barren land covered with wild grass

CONNECTIVITY

Noida sector 32 has good connectivity with:

I.G.I. Airport – 35 KM

Domestic Airport – 34 KM

Connaught Place – 23 KM

Railway Station – 24 KM

India Gate – 22 KM

I.S.B.T. – 12 KM



I.G.I. Airport



Domestic Airport



Connaught Place



Railway Station



India Gate



I.S.B.T.

SWOT Analysis

Strength

- The location of the site offers people to interact.
- The site has neat boundaries. Roads on two side with sufficient width of the roads front road width which is 75m
- And side road which is 45m wide.
- Close proximity to the metro station and availability of different modes of public and transit system makes it easily accessible.

Weakness

- Residential Apartment building right across the main road.
- No special views from the site except of the public park.

Threat

- With the advancement in construction on the road the traffic is likely to increase in future.
- Development of many recreational projects in future will depreciate it.
- Presence of multilevel parking adjacent to the site may cause clashes in traffic movement.

NEED OF THE PROJECT:

Today for shopping, entertainment, exhibitions, offices and etc.required

a place which should be properly designed to fulfill the requirement.

so I want to explore my design on those areas to develop their functions .

OTHER ADJECENT PROPERTY:

Huge residential project wave city is also under constuction .

Shaheed bhagat singh park also given in sector 31 which 1.5km away from the site.

SHAHEED BHAGAT SINGH PARK



COMPARITIVE ANALYSIS

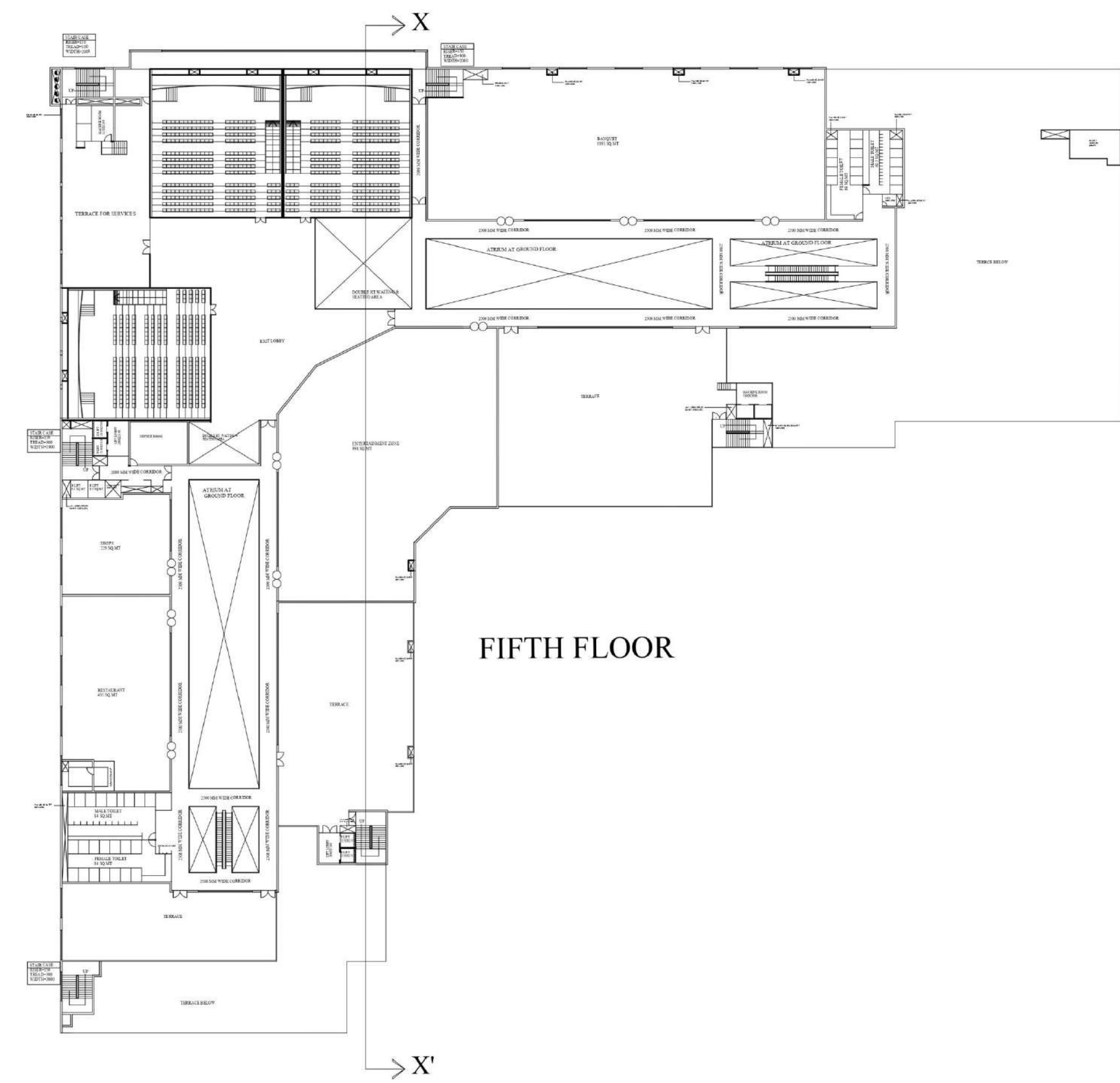
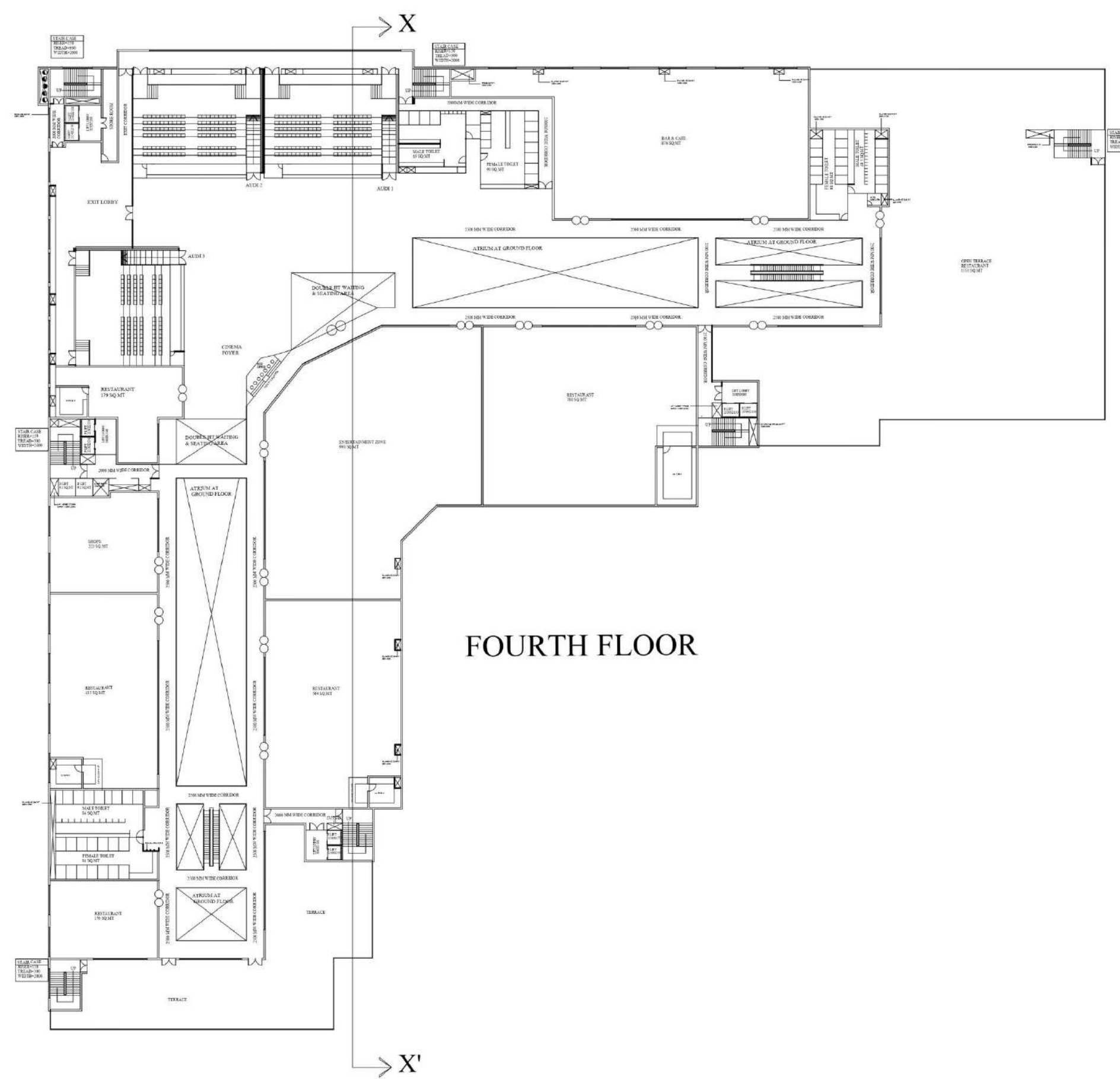
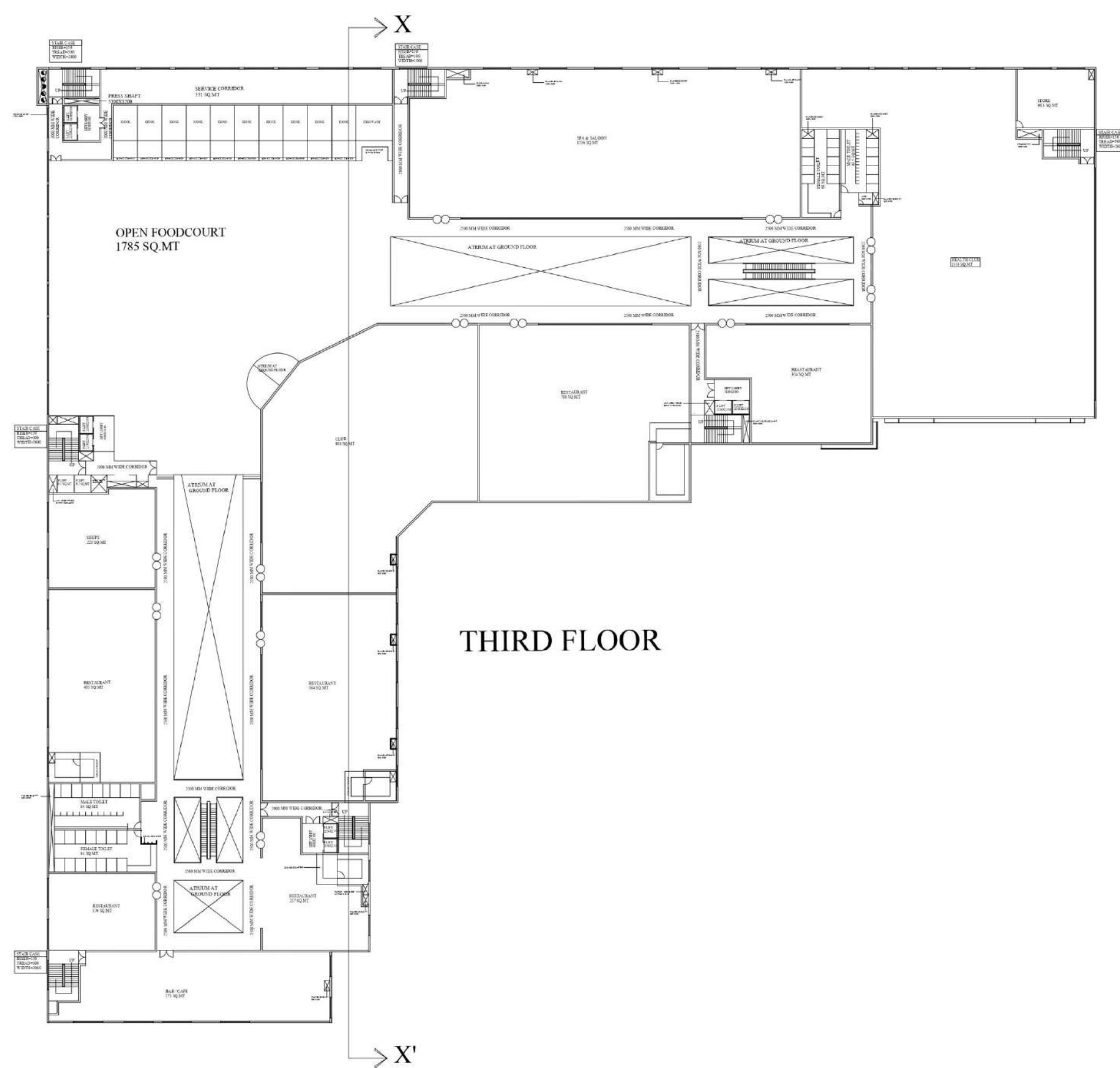
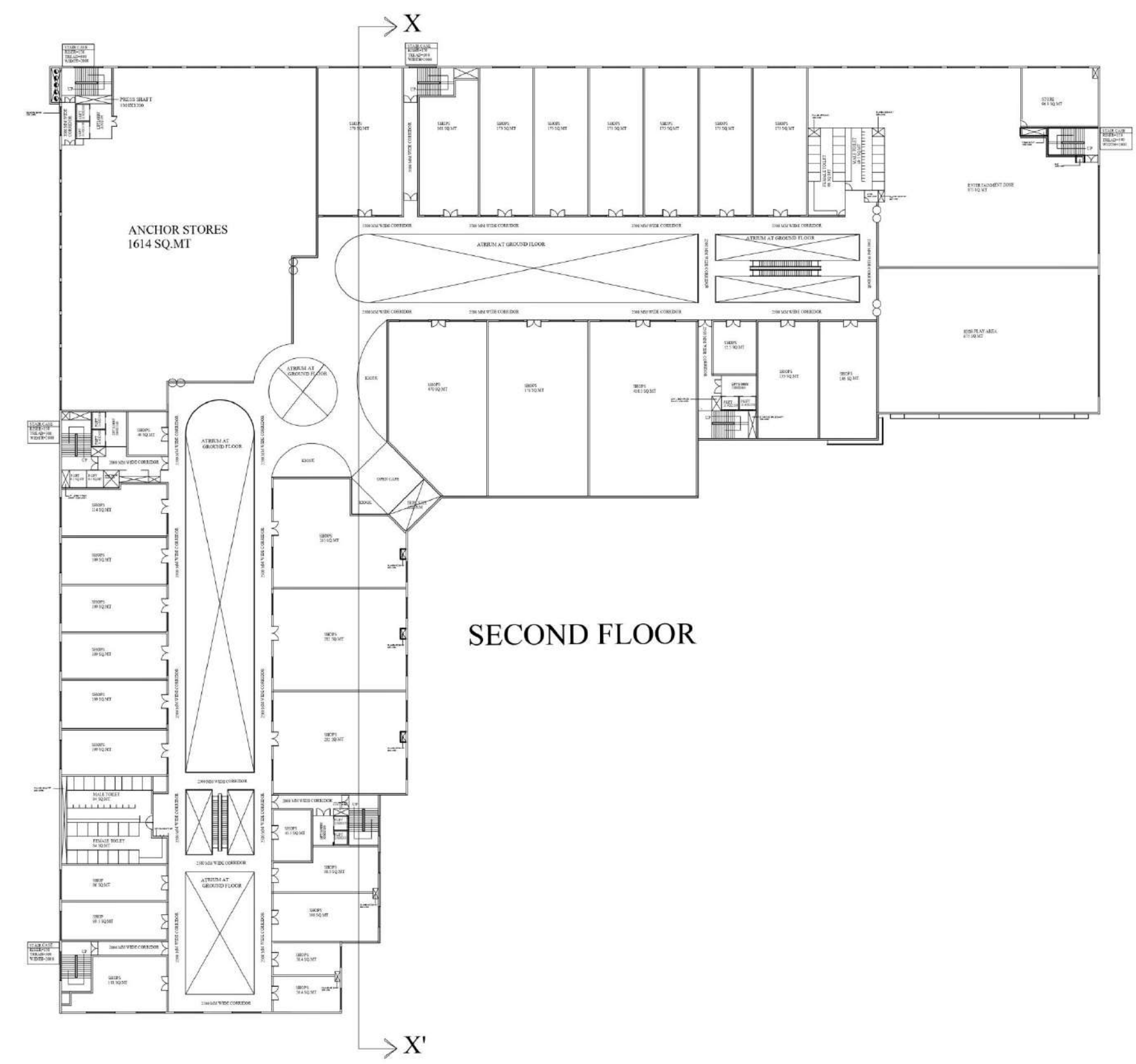
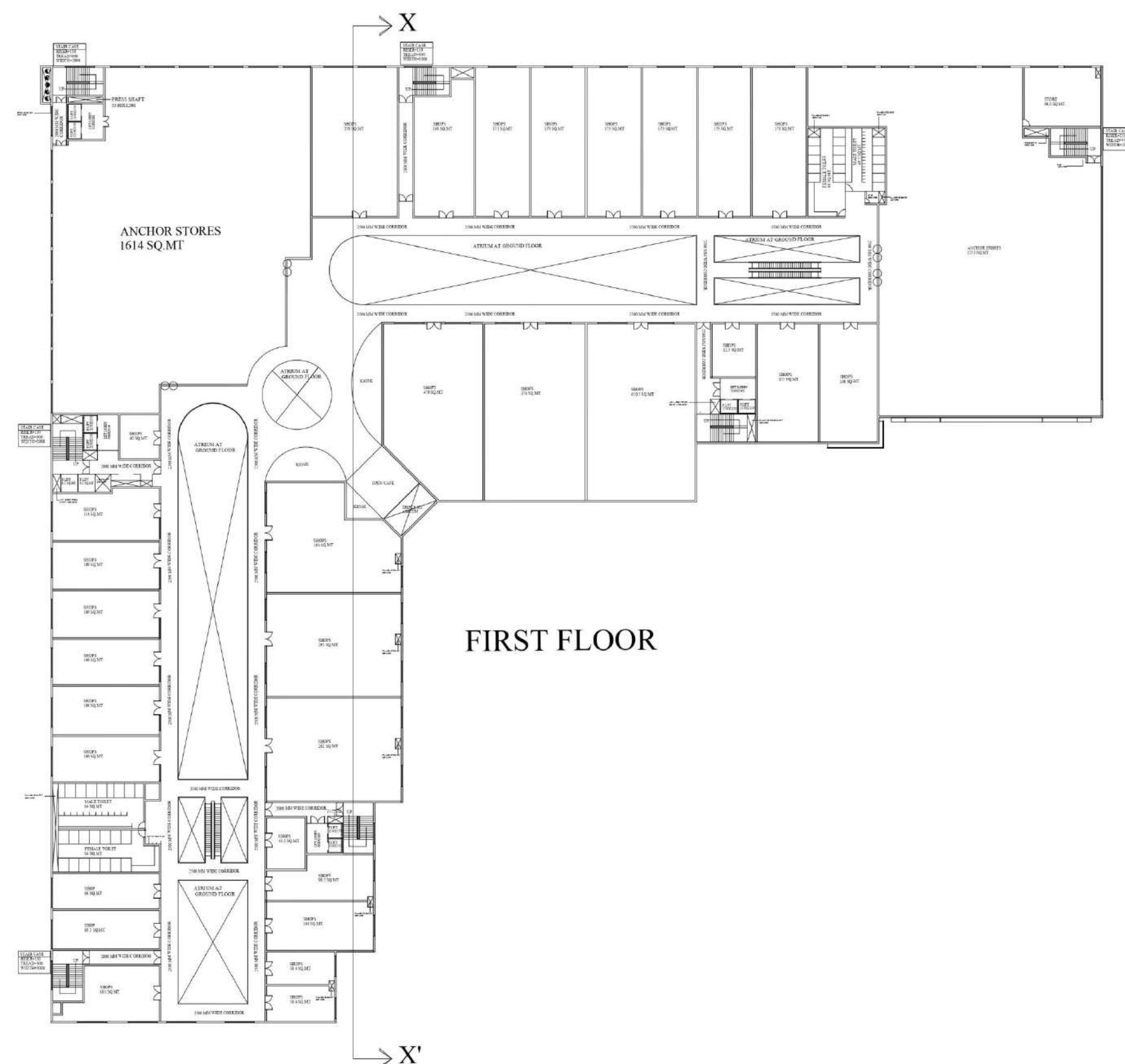
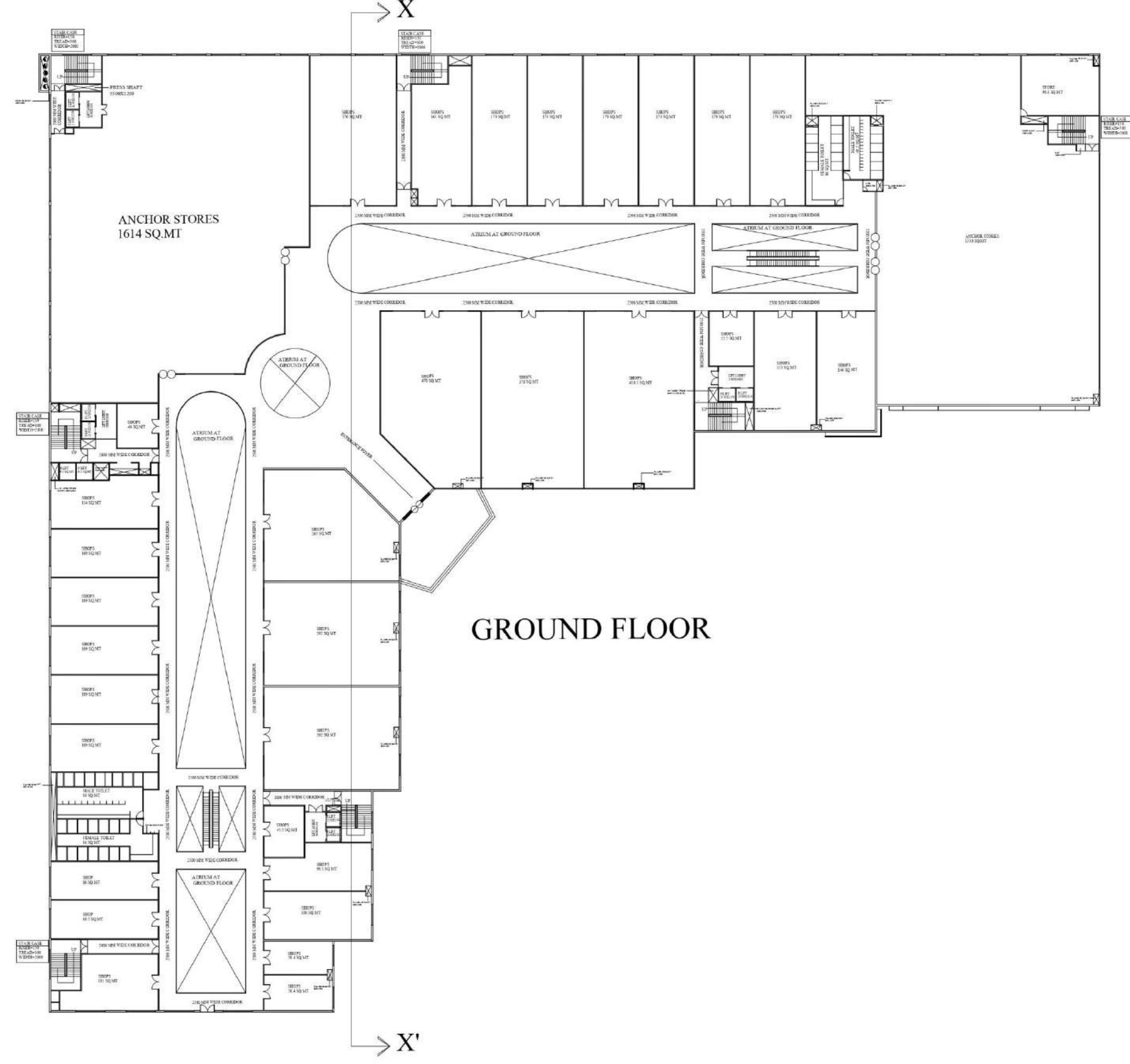
FUNCTIONS	SPACE	AREA IN SQ.MT	QUANTITY
CINEMA HALL	FOYER	75	CAPACITY OF HALL
	CINEMA1	-	200
	CINEMA 2	-	200
	CINEMA3	-	200
	CINEMA 4	-	200
	PROJECTOR ROOM	20	
SHOPPING COMPLEX	SNACK COUNTER	60	4 15 8 100
	TOILETS	50	
	<u>SHOPS</u>		
	ANCHOR SHPS	1000-1500	
	LARGE SHOPS	300-245	
RESTAURANT	MEDIUM SHPS	170-145	100
	SMALL SHPS	100-135	
	1 TYPE RES.	1000	
	2 TYPE RES.	470	
	3 TYPE RES.	250	

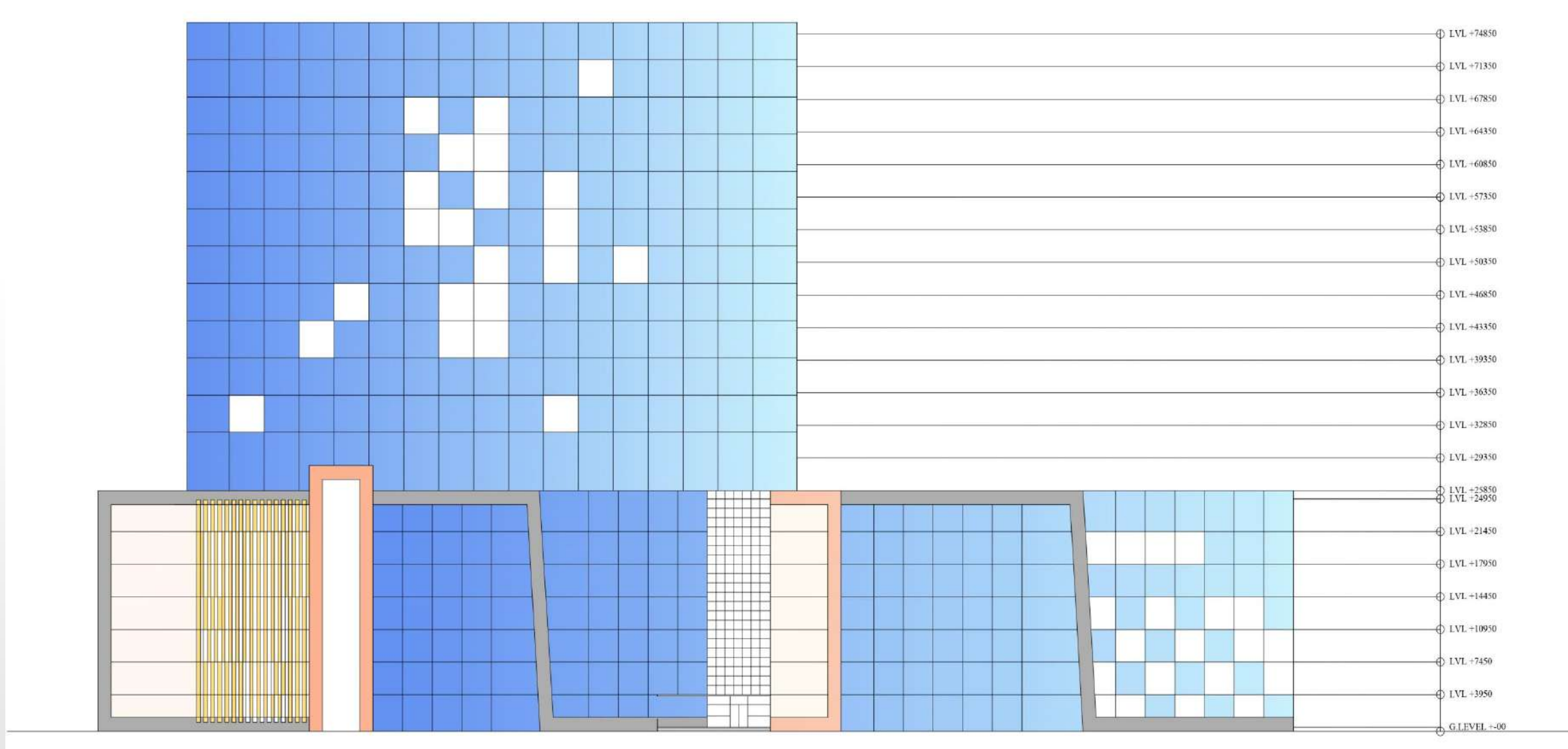
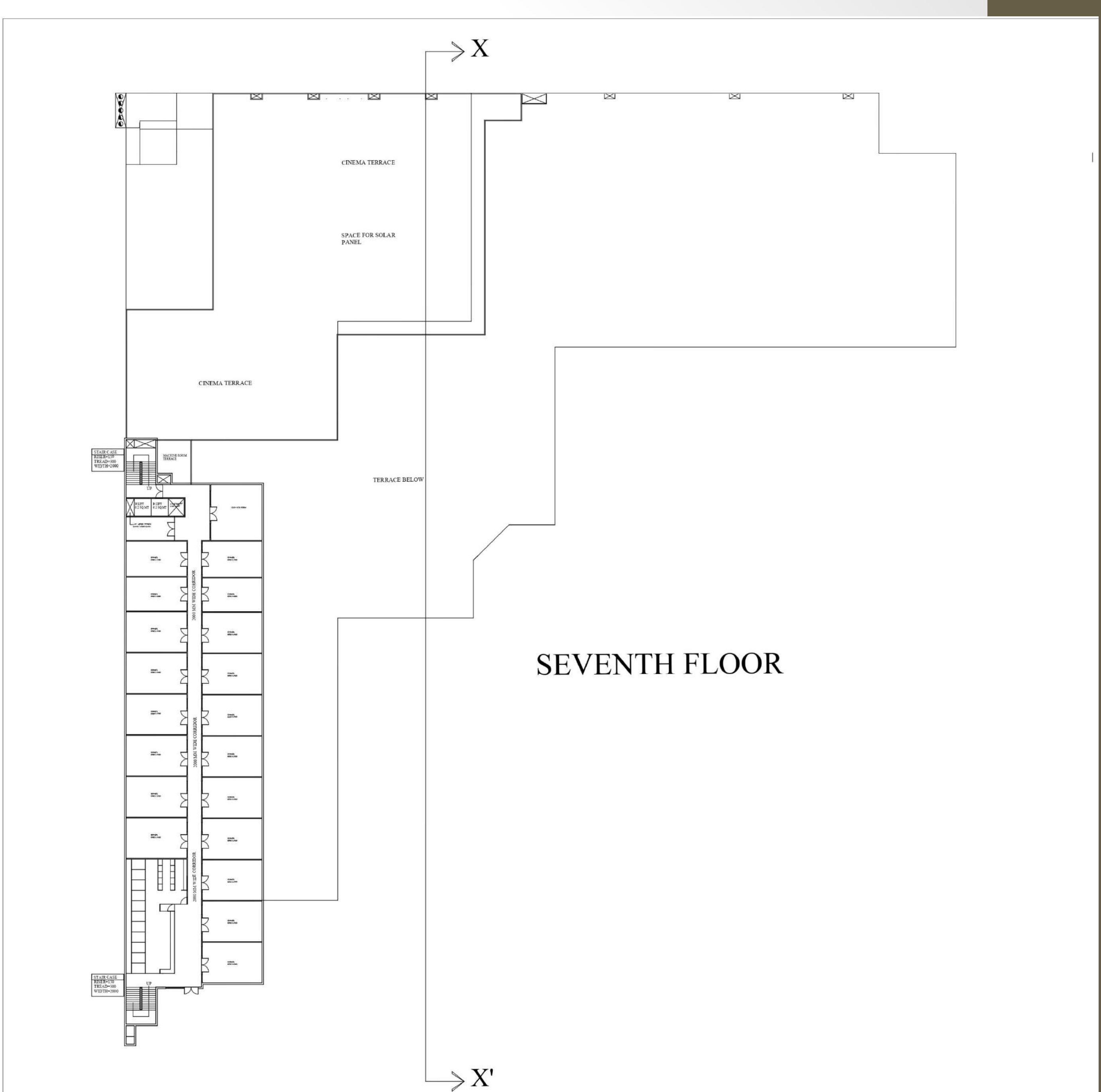
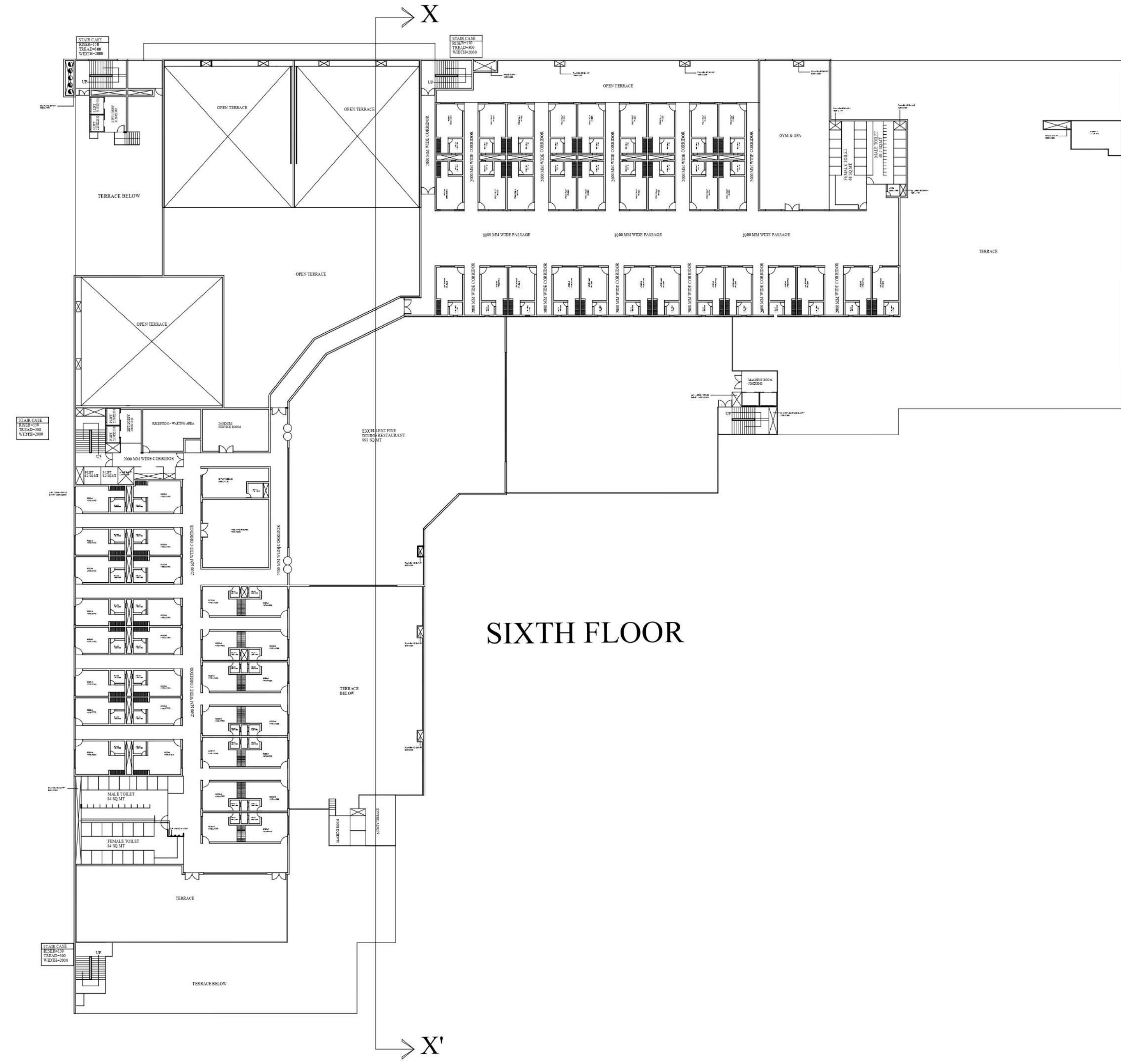
FUNCTIONS	SPACE	AREA IN SQ.MT	QUANTITY
GAMES	KIDS ZONES	400	-
ADMINISTRATI ON	MANAGER ROOM	25	
	CONFERENCE ROOM	100	
	STAFF ROOM	50	
SERVICES	A/C PLANT	700	
	A.H.U ROOM	50	
PARKING	CARS TWO WHEELERS5	200	1300
OFFICES	LARGE MEDIUM SMALL	506-800 90-180 40-65	1-10 55-80 20-50 90 PERSON
CONFERENCE HALL			
COVERED AREA OF FLOOR			
GROUND FLOOR		10378	

COMPARITIVE ANALYSIS

FUNCTIONS	SPACE	AREA IN SQ.MT	QUANTITY
FIRST FLOOR		10378	
SECOND FLOOR		10078	
HOTEL			
LOBBY+CIRCULATION		300	
RECEPTION+LUGGAGE+REGISTRATION		150	
RESTAURANTS		120 SQ.MT	
COFFEE SHOP		120SQ.MT	
BAR(ELEVATOR COUNTER STORE) LOUNGE		90 SQ.MT	
TOILESTS		90 SQ.MT	
PRIVATE DINING MEETING ROOM		270 SQ.MT	
HEALTH CLUB		200 SQ.MT	

FUNCTIONS	SPACE	AREA IN SQ.MT	QUANTITY
RESIDENTIAL			300 ROOMS
BEDROOMS		7950 SQ.MT	
CORRIDOR ELEV.		93 SQ.MT	
SERVICE AREA		210 SQ.MT	
TOTAL RESIDENTIAL		10950 SQ.MT	
OTHER AMMENITIES			
KITCHEN STORES		750	
STORTES		270	
WORKSHOPS		120	
LAUNDRY		210	
OFFICE + ACCOUNTS		150	
CIRCULATION SERVICE ELEVATOR		2100 270	

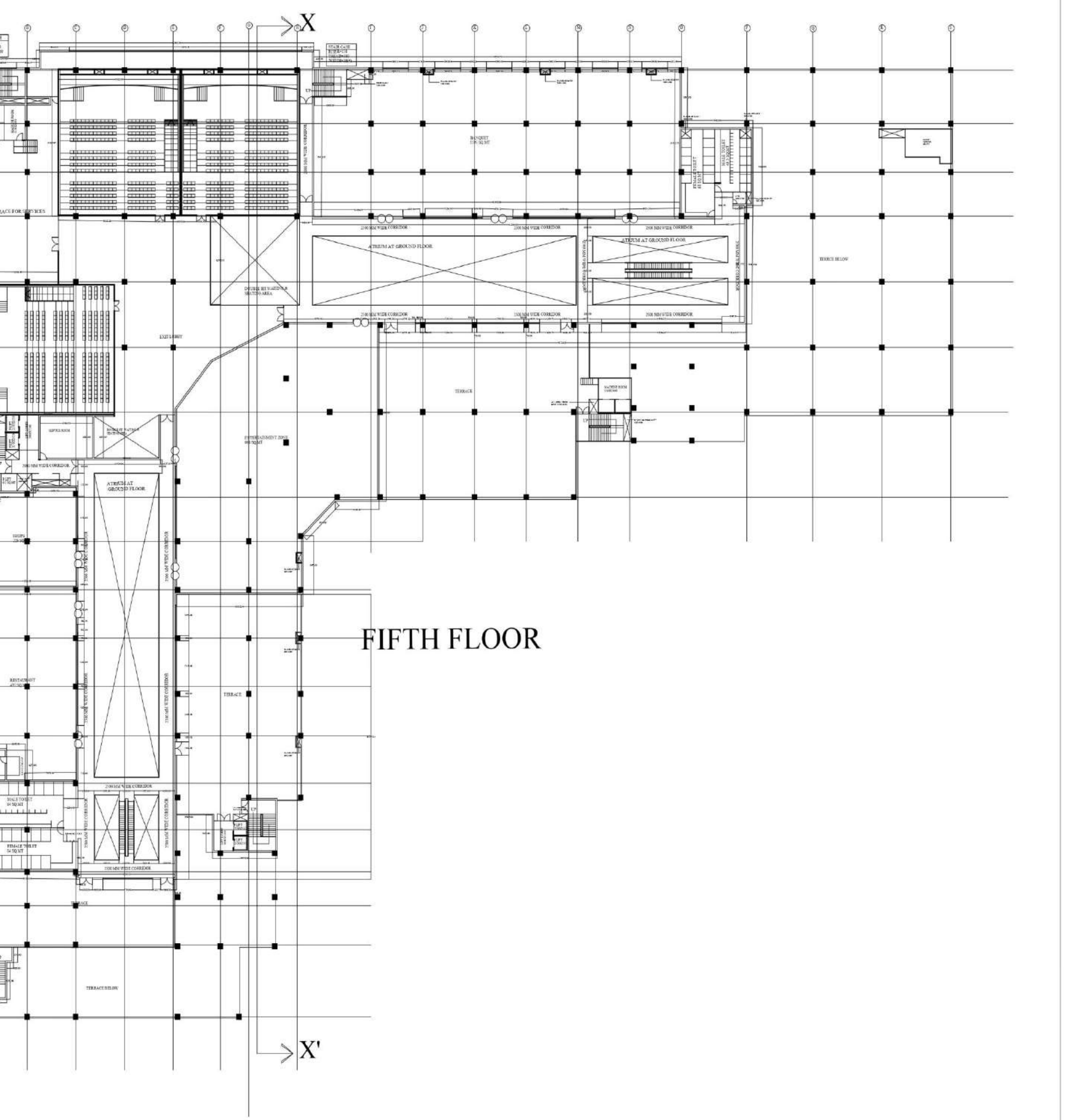
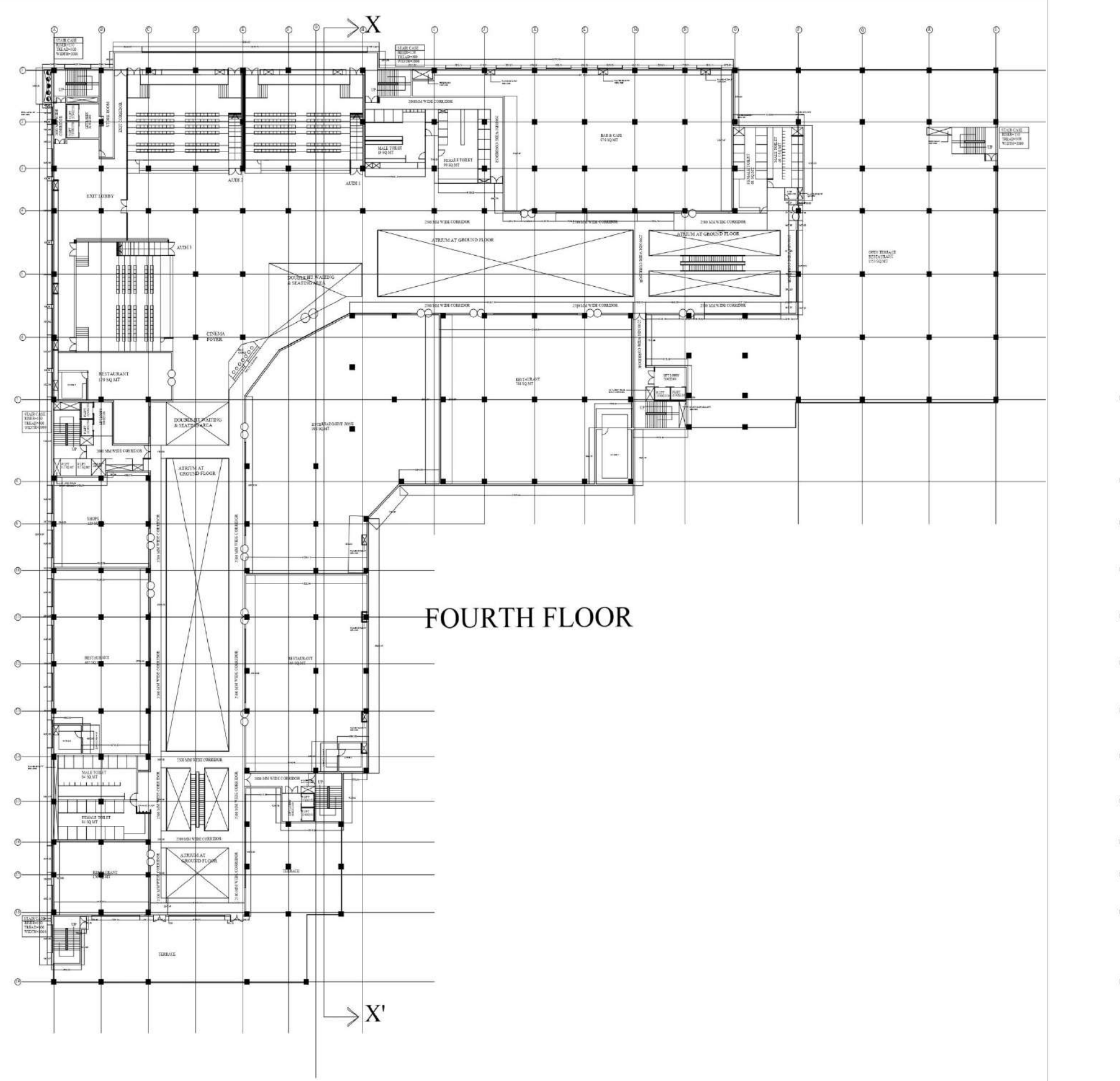
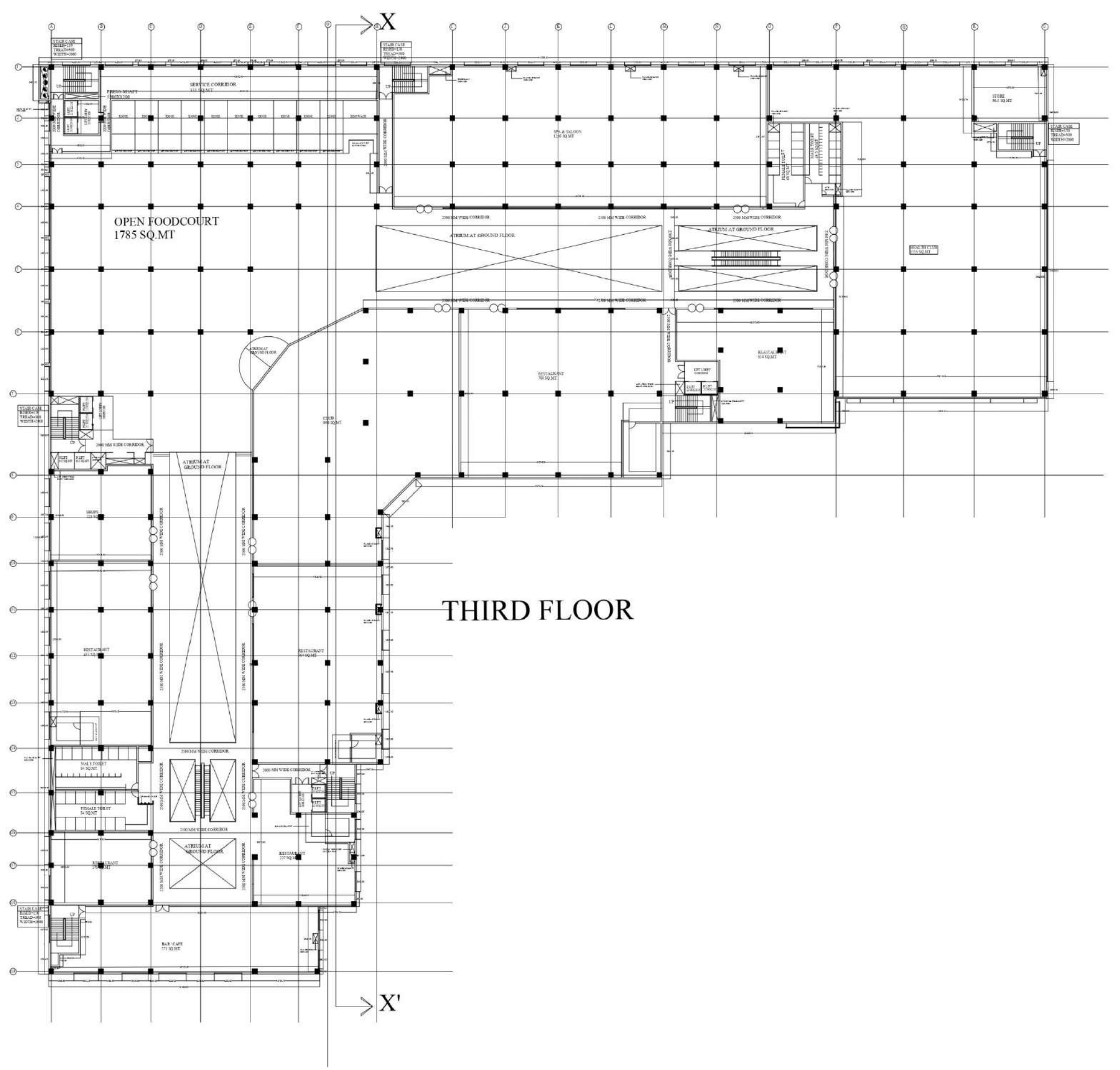
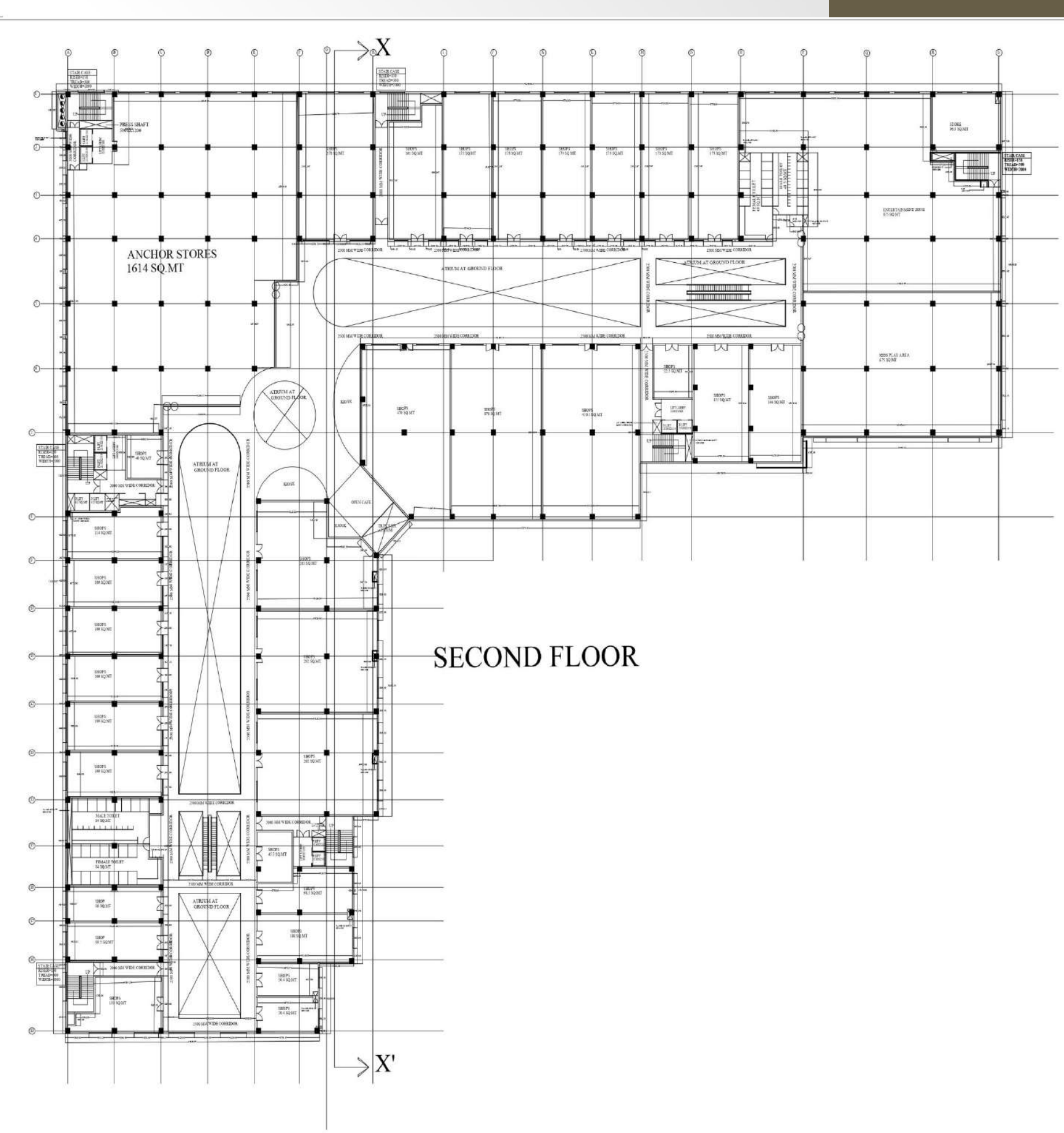
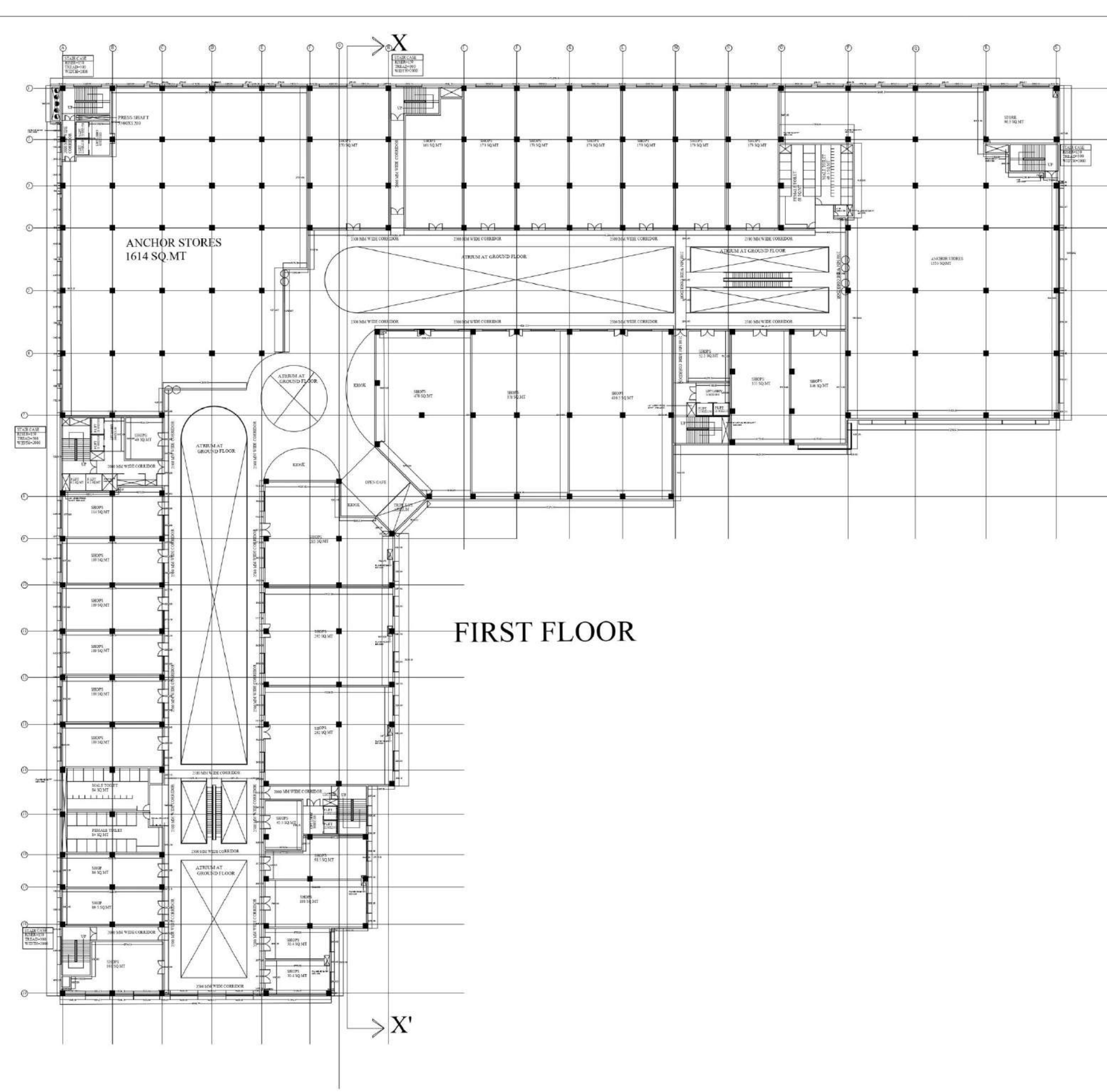
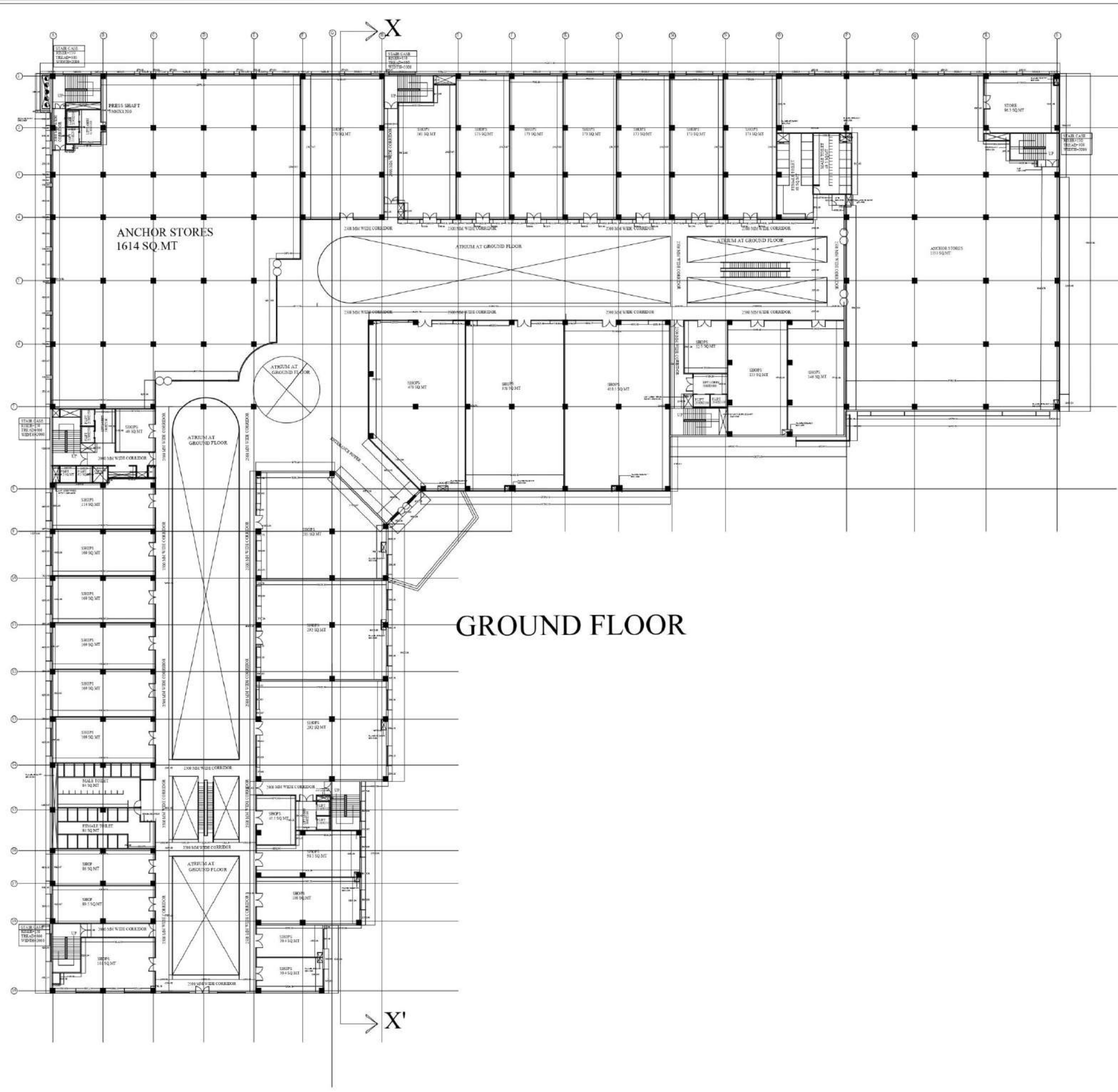


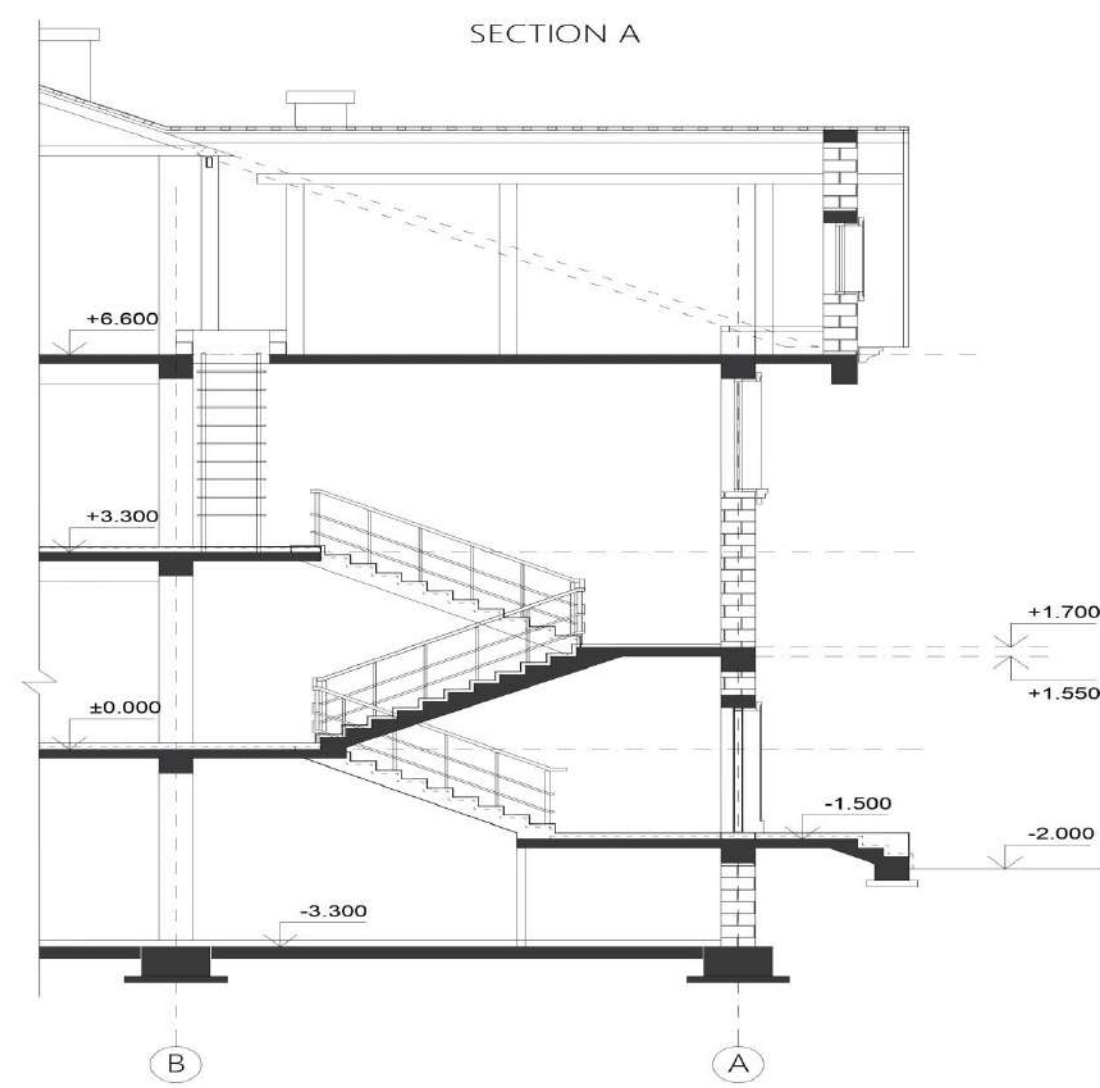
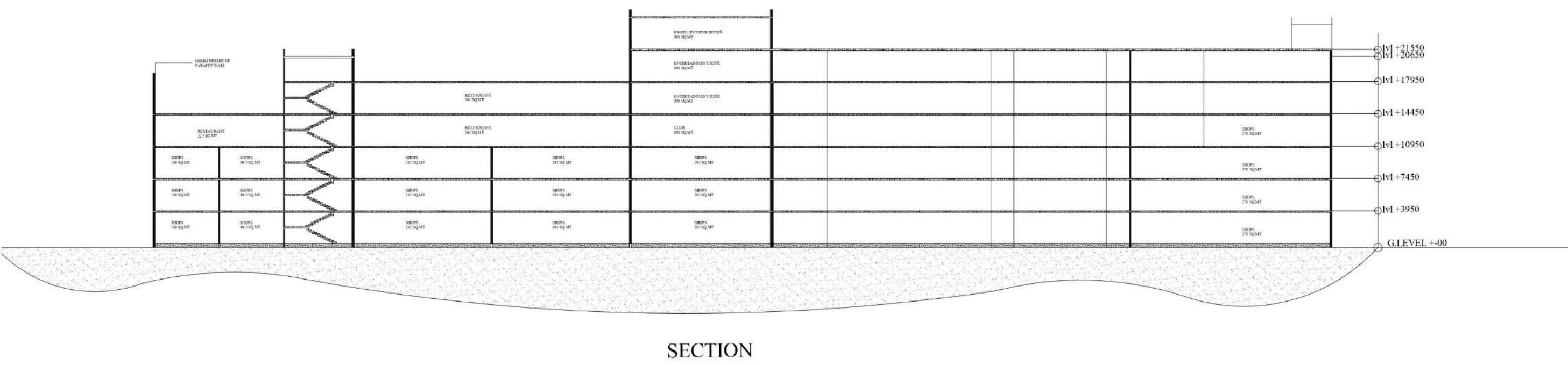
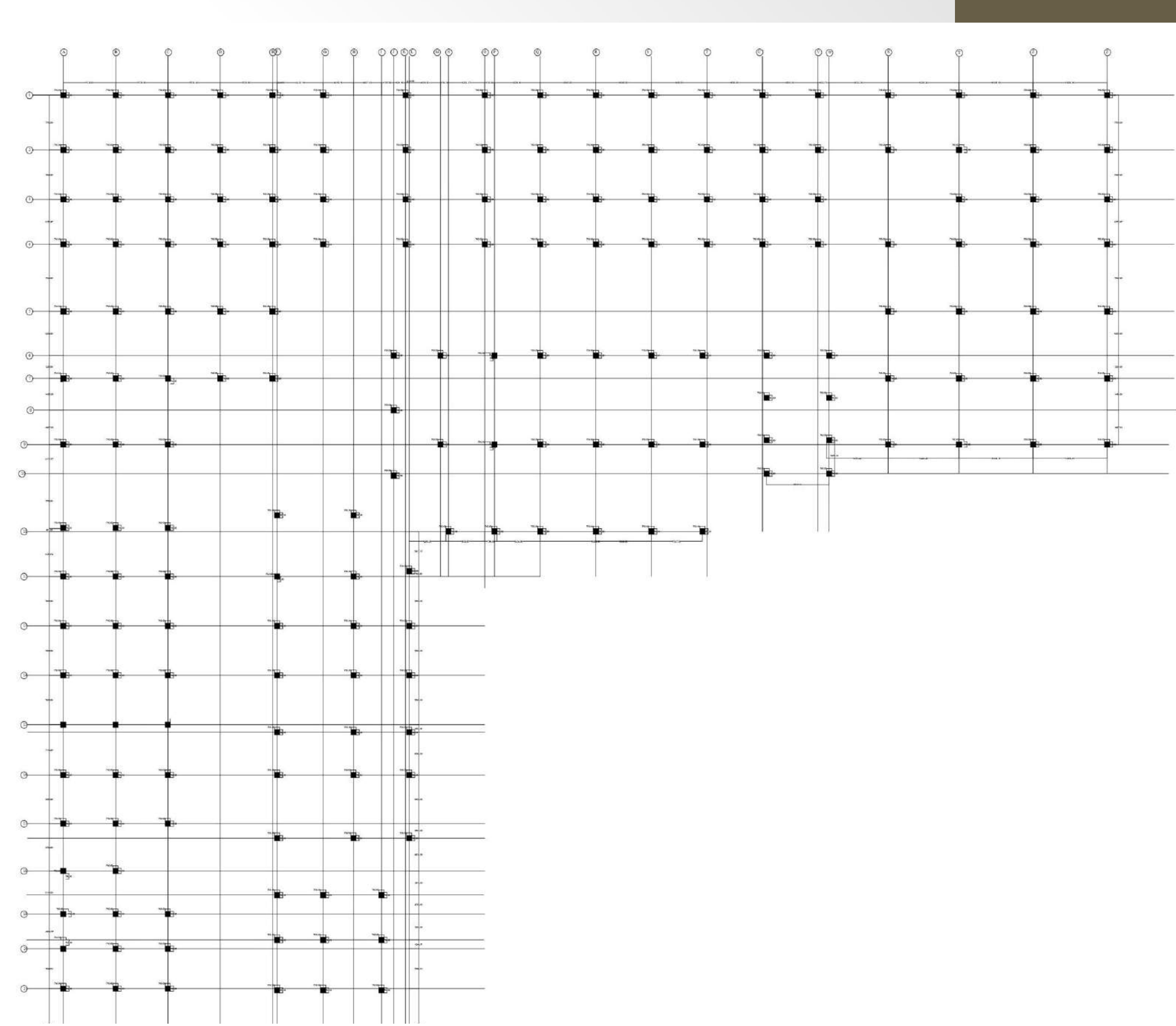
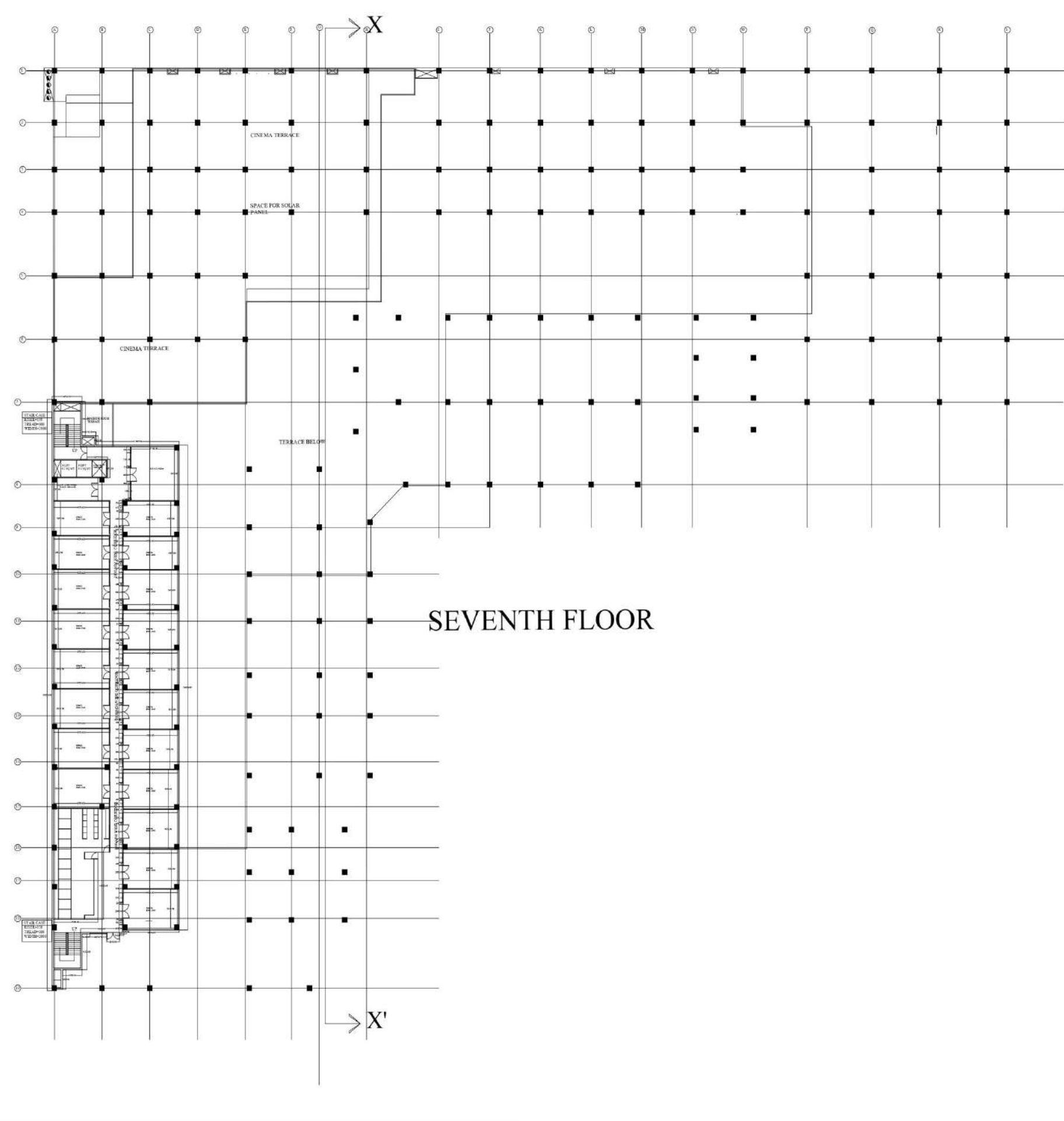
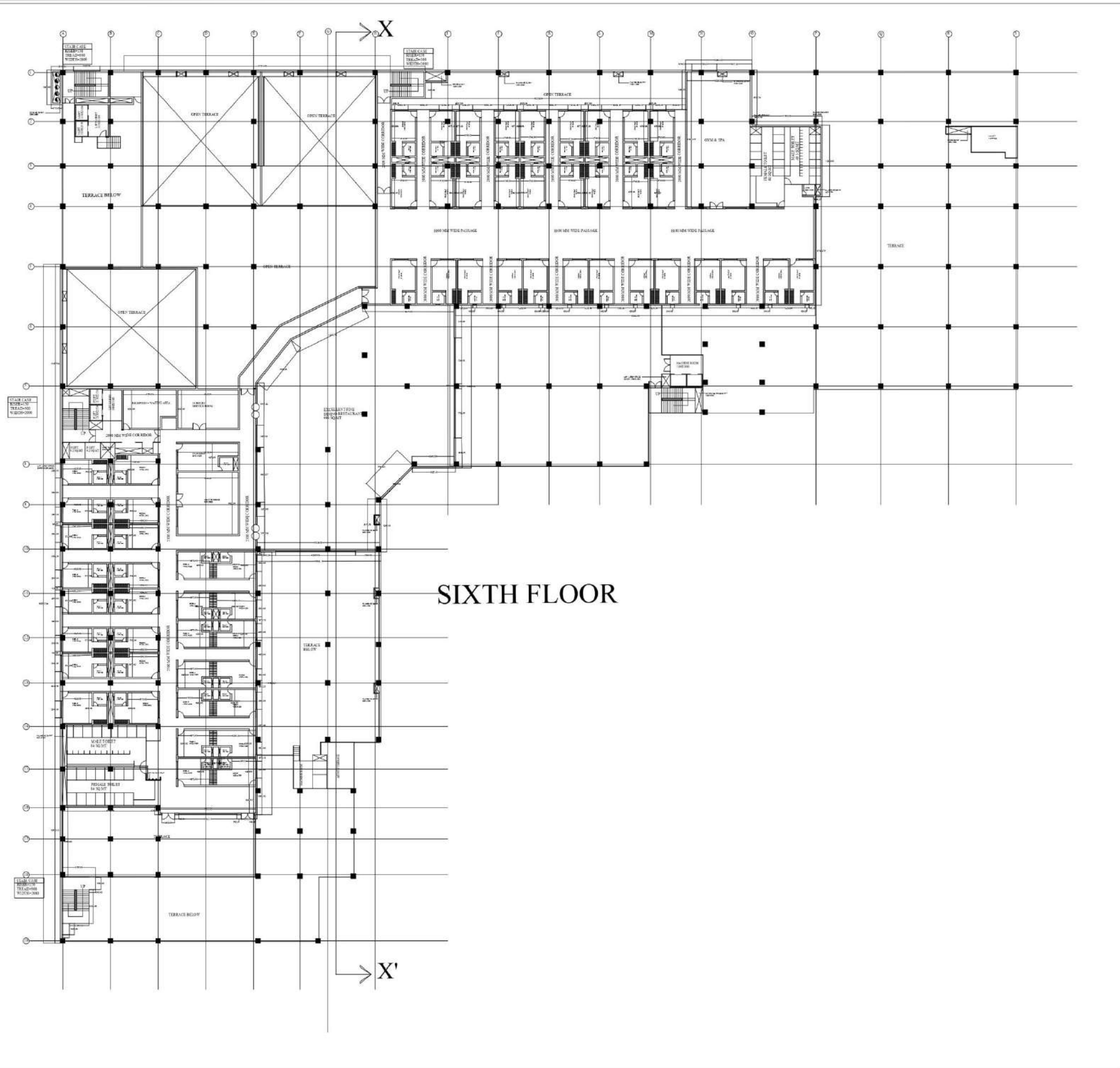


FRONT ELEVATION

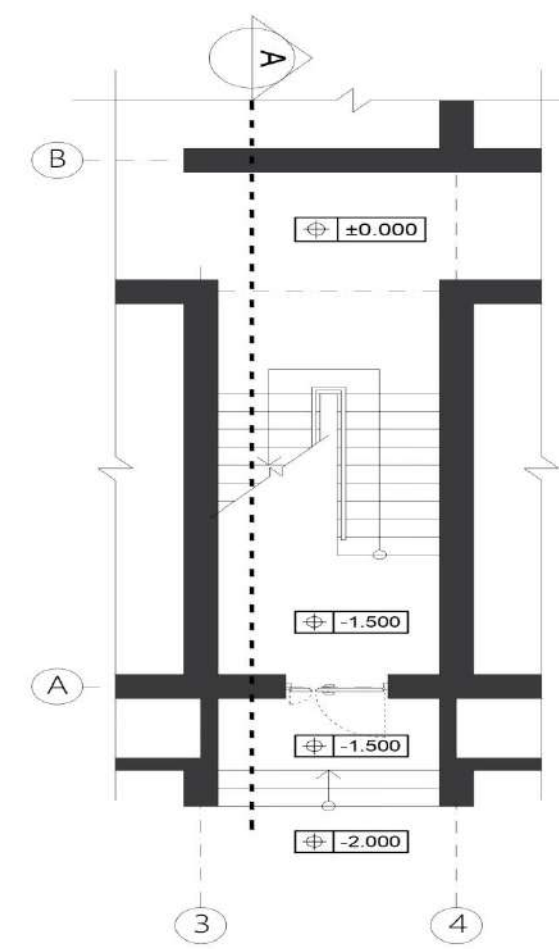


SIDE FRONT ELEVATION





LEVEL ± 0.000



LEVEL +3.300

