

design portfolio

portfolio



“Even a
BRICK wants to
be **Something**”
~ Louis Kahn



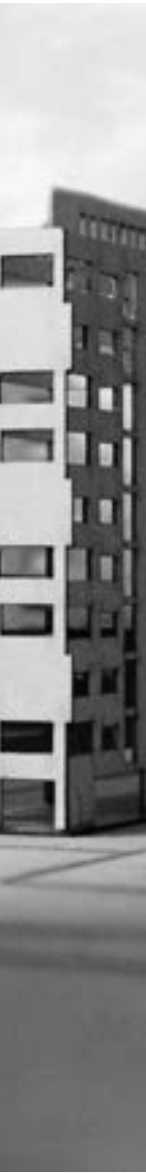
Professional Works



Thesis: Exhibition Center + Urban Park



Design Project: Sports Complex



Design Project: Commercial Tower



Design Project: Club House



“The Roof”



“Through my Lens”



contents



AWSoM

location: **Bentonville**, Arkansas, USA



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Design Project
OSD | Outside, May 2022
Architecture + Landscape Project

Founded in 2021, by philanthropist Alice Walton, the Alice Walton School of Medicine (AWSoM) is an upcoming school that will be offering 4 year medical degree programs that builds on conventional medicine with a whole health approach to care.

I got an opportunity, as a part of the OSD team to work on this project which is spread over a land area of 14 acres, primarily focusing on the on-structure landscape design development and project coordination.



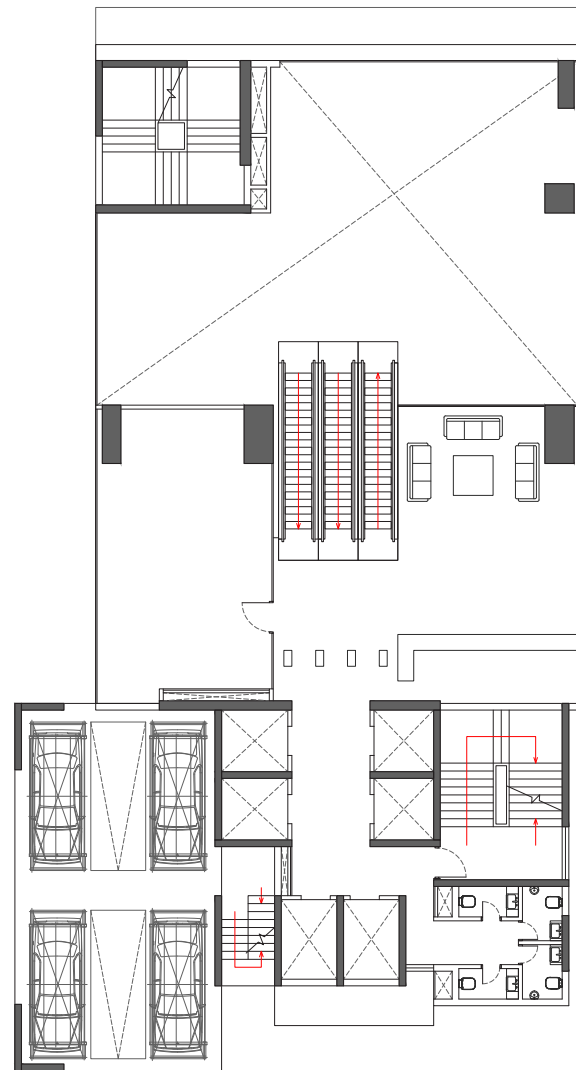
The centerpiece of the project is a custom-designed waterfall system inspired by the Ozark geography. This isn't your average pre-fabricated fixture; instead, the cascading tiers and natural stonework mimic the dramatic limestone bluffs and segmented water flow of the region.

The winding stairs along the cascade lead the visitors to a climbing trail that ends at the top terrace of the structure, bringing the surrounding woodland experience into the structure, blurring the line between the wild and urban environment.



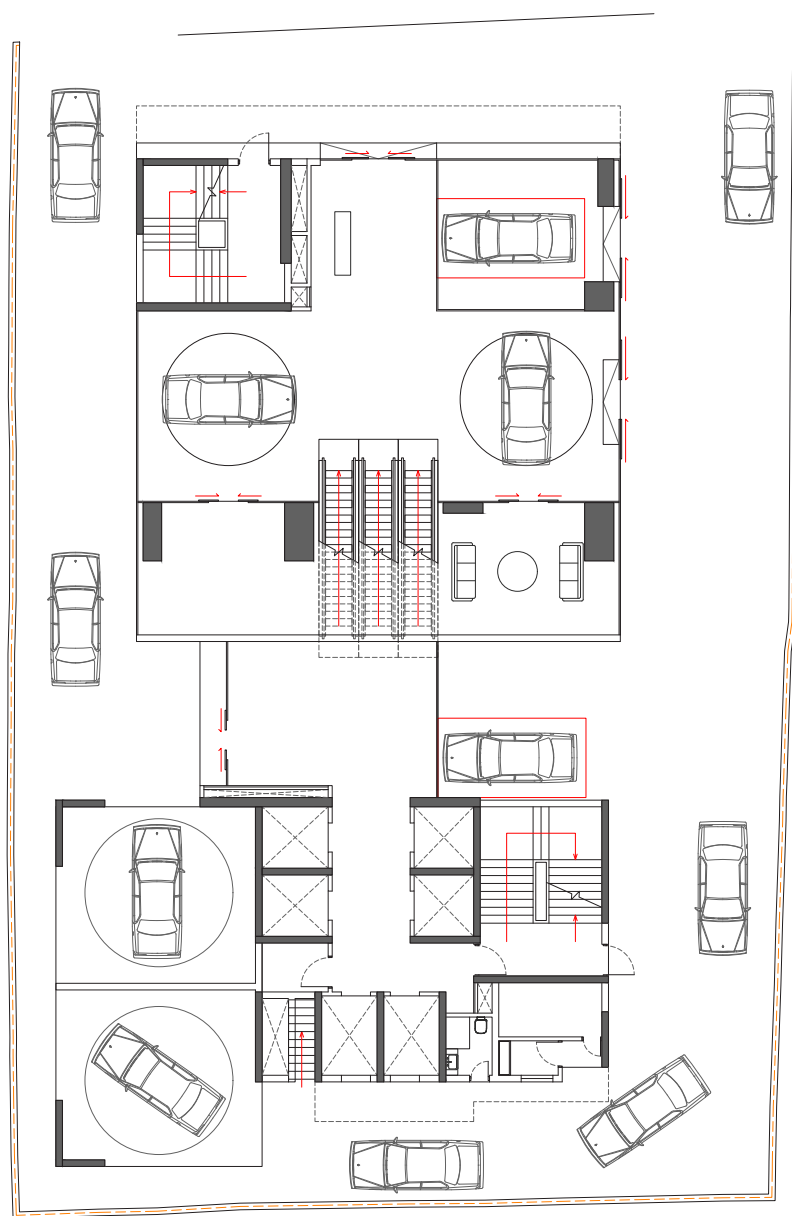
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For more info: <https://www.osd.nyc/awsoM>



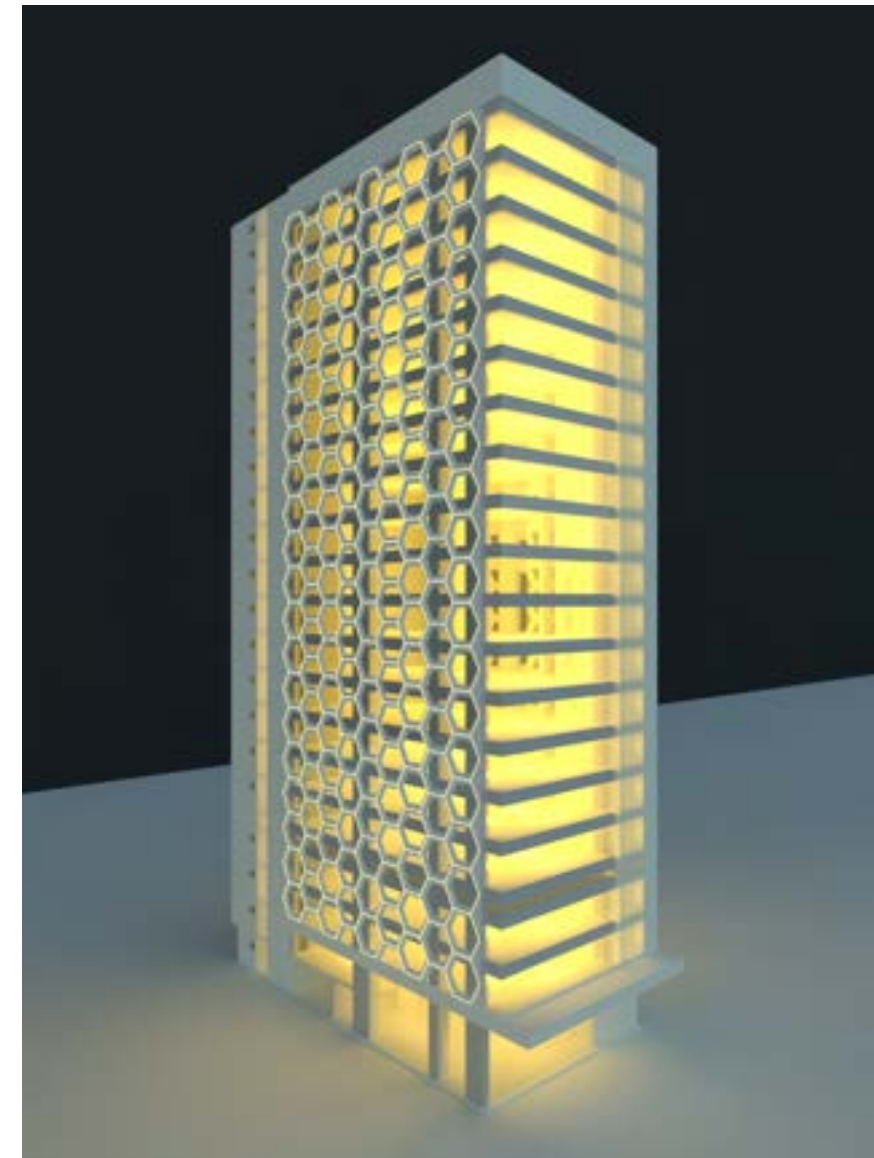
first floor layout

The first floor is a mezzanine housing the building security and waiting along with an office space for the car showroom below.



ground floor layout

The ground floor houses the car showroom, marketing office and a lounge along with a separate lobby for the hospital at the back.



commercial tower

location: Borivali, Mumbai, Maharashtra

Design Project

Freelance, May 2020 | Architecture + Interior Project

This proposed project for a new upcoming developer is a mixed used commercial tower, located at Bhattad Road, Borivali West.

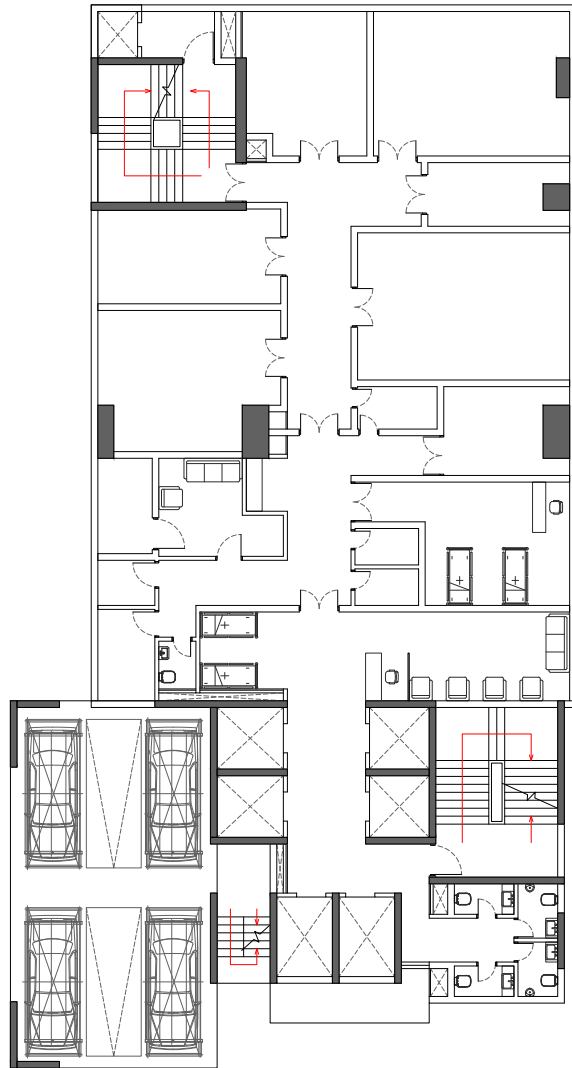
The tower houses a 2 storey state of the art car showroom, 9 storey 100 bed Hospital, 6 storey office spaces and a 3 storey banquet, all amounting to more than 1,00,000 sqft of construction area.

The aim of the design was to create large unobstructed spaces which were flexible enough to accomodate different functions of hospital, offices and banquet.

The client had a specific requirement to incorporate hexagonal shapes in the building elevations. Hence I proposed two ideas for the elevation. First was to use a hexagonal lattice skeleton as an outer structural support and the second idea was to use an illuminated curtain wall made with hexagonal framed glass panels.

The scope of project included planning, designing elevations and interiors and coordinating with various agencies and vendors to accomodate the required amenities and services.





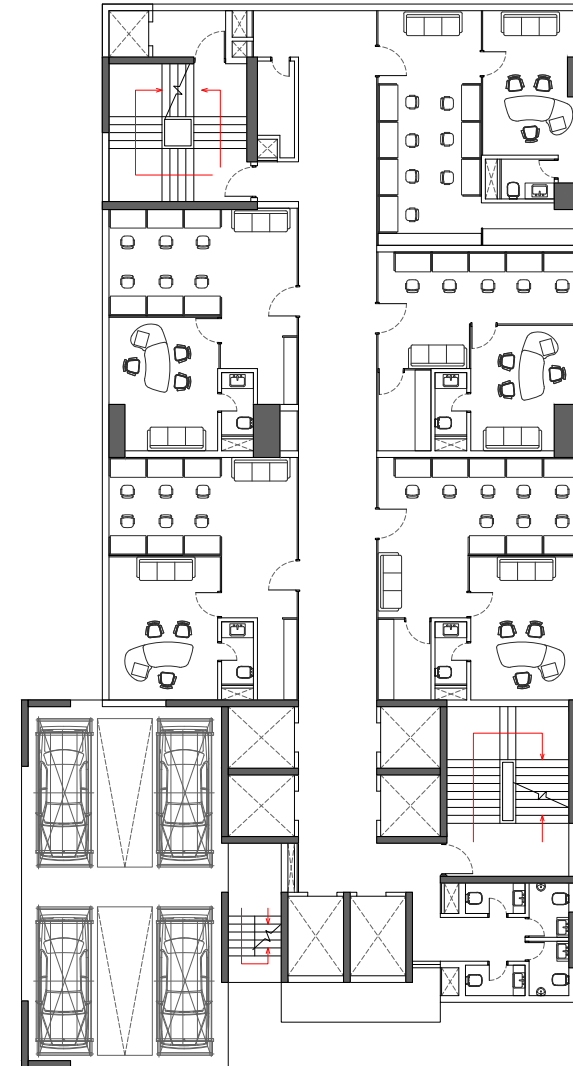
operation theatre layout

The operation theatre department for the hospital lies directly above the first floor. Its services are cut off from the building above via a service floor. This provides greater flexibility in terms of planning large operation theatres without any obstructions and risk of contamination.



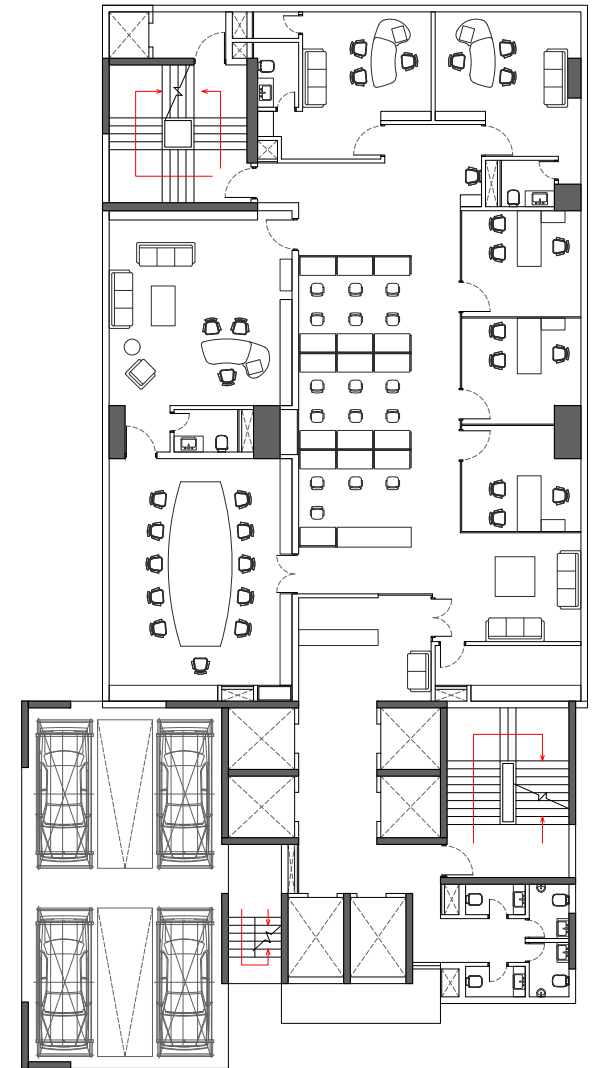
in-patient department layout

The in-patient department shares the same services layout as the floors above. The IPD consists of micro single bedrooms which offer complete privacy to the patients along with an attached toilet for each bed.



split office layout

The commercial offices section of the building was divided into 2 types of layouts. One of it was a split offices layout which consisted of 5 individual office spaces of approx. 700 sqft each with attached toilets.



single office floor layout

The second type of office layout was a single floor single office layout which was proposed in three combinations. Each consisted of a dedicated waiting space, 12-20 seater conferences, 2-3 personal owner cabins and working areas for 15-35 employees.

Spread over more than 15,000 sqft. of built up area, this private residence stands in the midst of the famous JVPD scheme in Juhu, Mumbai.

Nothing is simple or small in this bungalow. From the volume of the spaces to its design, everything here is trying to make a statement.

Being one of the most prestigious projects at the firm, I had the opportunity to work on its design, and space planning and be able to bring those ideas from paper to reality.

My scope of work included generating design ideas, design drawings, execution drawings, client - consultants - site coordination, maintaining BOQs and material procurement.



private residence

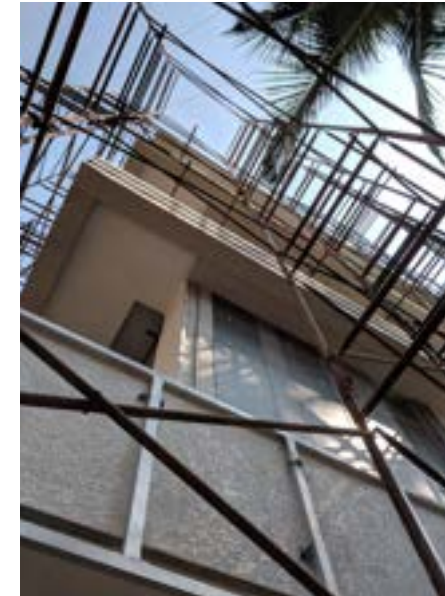
location: **Juhu**, Mumbai, Maharashtra

Design & Execution Project

Divyang Joshi Architects, June 2017 - 2020 | Architecture + Interior Project



This project has provided me with a diverse experience of the different scales of work on any site. I have worked on from the tiniest of furniture details to major extensions and rectifications of the structure.





The concept was to keep the design minimal, use bright and bold colours in combination with wooden polish and neutral earthen colours to give the space a very lively, energetic feel but still imparting a warm homely feel to the apartment.



This project is a small 800sqft. residence for three young occupants., located in an old load bearing building at Vile Parle.

I had the opportunity to work on this project right from its inception to its handover to the clients.

The design was intended to be minimal, modern and cost effective. But, the real challenge here was to design practical and ergonomical spaces without altering the heavy structure in any way.

Despite its challenges, the result turned out to be a practical and open layout.

My scope of work included taking initial measurements, planning, designing, making execution drawings, maintaining BOQs, material procurement and site coordination.

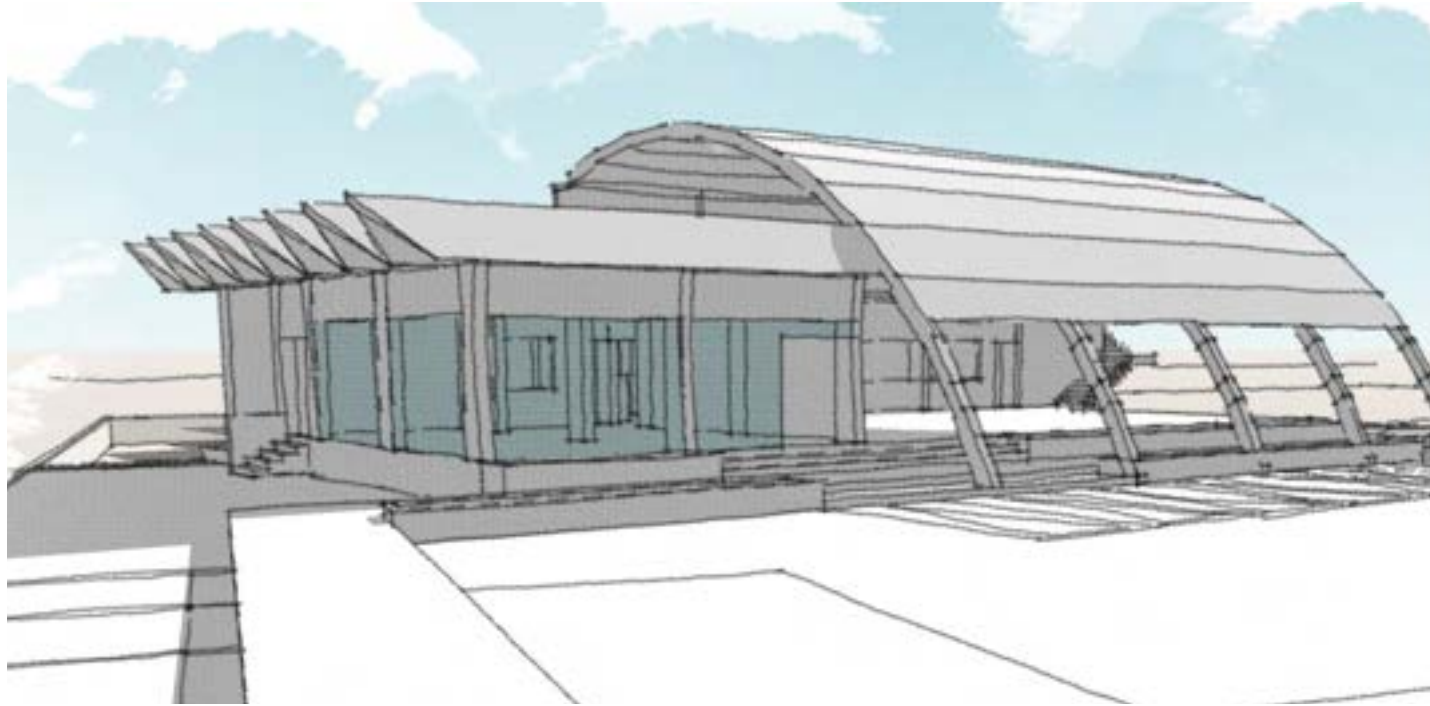


private residence

location: **Vile Parle**, Mumbai, Maharashtra

Design & Execution Project

Divyang Joshi Architects, Jun 2018 - Jan 2019 | Interior Project



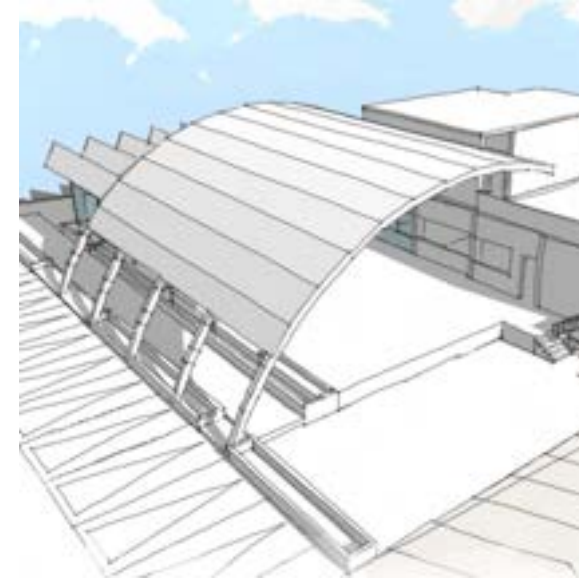
highway rest-stop

location: **Vaijapur**, Aurangabad - Nasik Highway, Maharashtra

Design Project: Internship
Studio Nine Architects, January 2015
Architecture + Interior Project

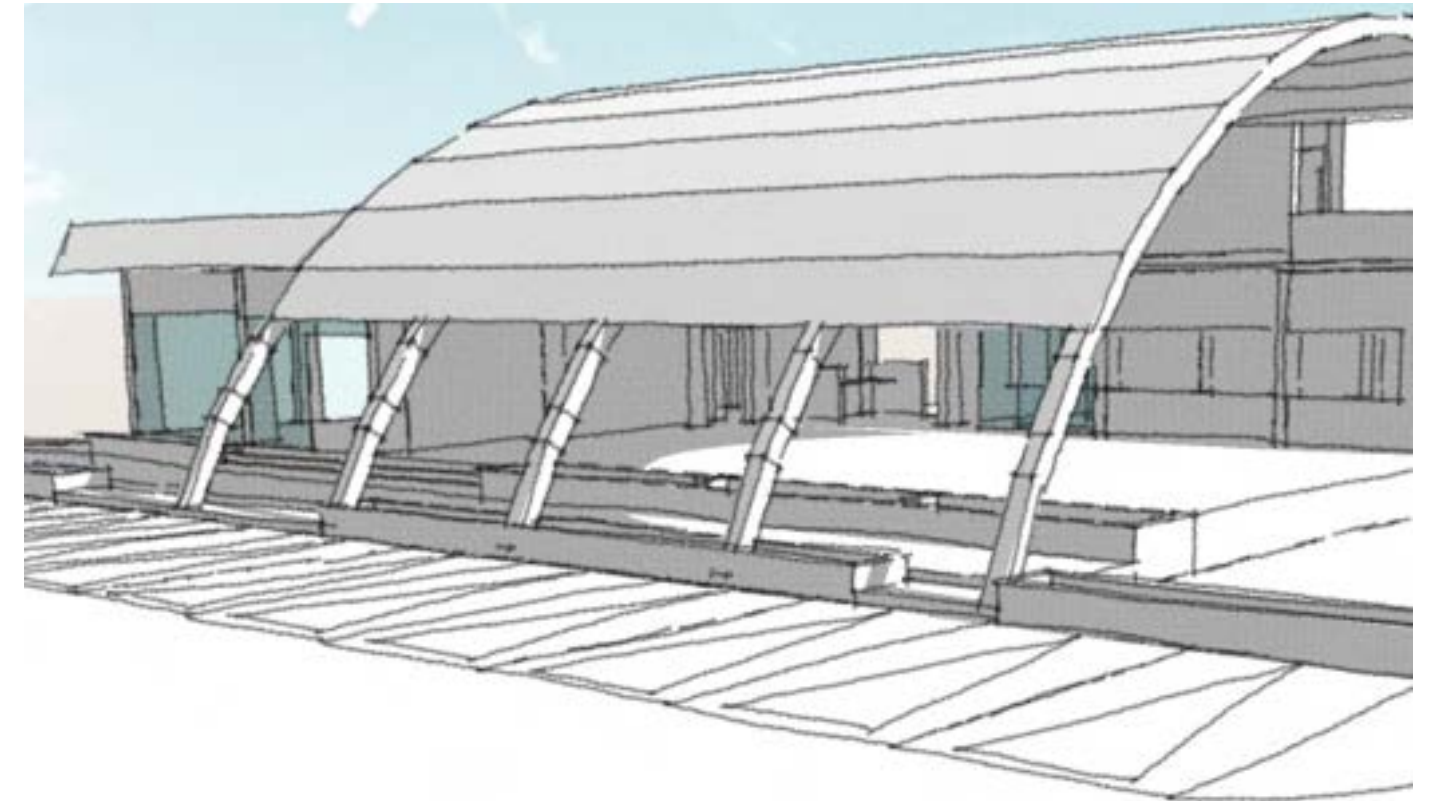
First month into my internship at Studio Nine Architects, Mumbai I was given the task of designing a concept for the roof of an upcoming highway rest stop on Aurangabad - Nasik Highway, Maharashtra.

The roof's design was to be such that it is simple and easy to construct and stays well within the client's budget. Hence, I worked a design that fit into the client's requirements.



The design consisted of two parts, a large non AC dining hall and a smaller AC hall. The concept was to create a dynamic composition for the roof that was tall enough and iconic to be noticed from far away.

I chose to go with an arched steel spaceframe for the larger hall and RCC folded plates for the smaller one. Both these types of roofs provide the advantage of large columnless spans which in-turn help with accommodating more people at once, thus benefiting the business.



I had proposed to extend the seating for the restaurant into the outdoor landscaped area with a roof covering. The idea behind it was to provide a variation in the seating and ambience for the customer and also to help the business double its overall seating capacity.



The roof of the outdoor seating was to be made in spaceframe and stretch fabric covering so as to keep it from overpowering the space.

I had also provided roman blinds in bamboo mats to filter out the direct sunlight and plantation buffers reduce glare from the adjoining roads and buildings.

The entire outdoor area could also be lit with Indian lantern styled lights in order to blend the restaurant's ambience to its rural surroundings.



Design Project: Internship
Studio Nine Architects, February 2015
Architecture + Interior Project

restaurant revamp

location: **Vaijapur**, Maharashtra

Later into my internship at Studio Nine Architects, Mumbai I was given the task of spatial planning for a restaurant revamp project. My role was to understand the existing site and propose changes to enhance the look and feel of the space.

Mumbai is the financial capital of India; it is and has been a host to many industries throughout its existence. It has traditionally owed its prosperity largely to its textile mills and seaport till the 1980s. These are now increasingly being replaced by industries employing more skilled labour such as engineering, diamond polishing, healthcare, and information technology.

Today when the significance of anything is determined on the economic scale, tourism is gaining importance by the day; as it is becoming a major source of revenue for many countries. With India's economy growing at a pace second only to China, there has been a rapid improvement in infrastructure, which ultimately gives rise to travel and tourism. Mumbai has always attracted a large number of domestic and international tourists, especially business tourists. This growing popularity among tourists requires a bigger and better infrastructure to serve them.

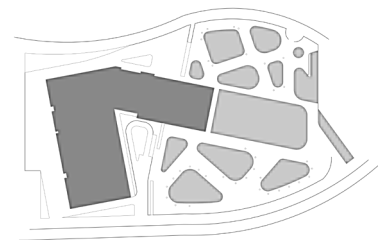
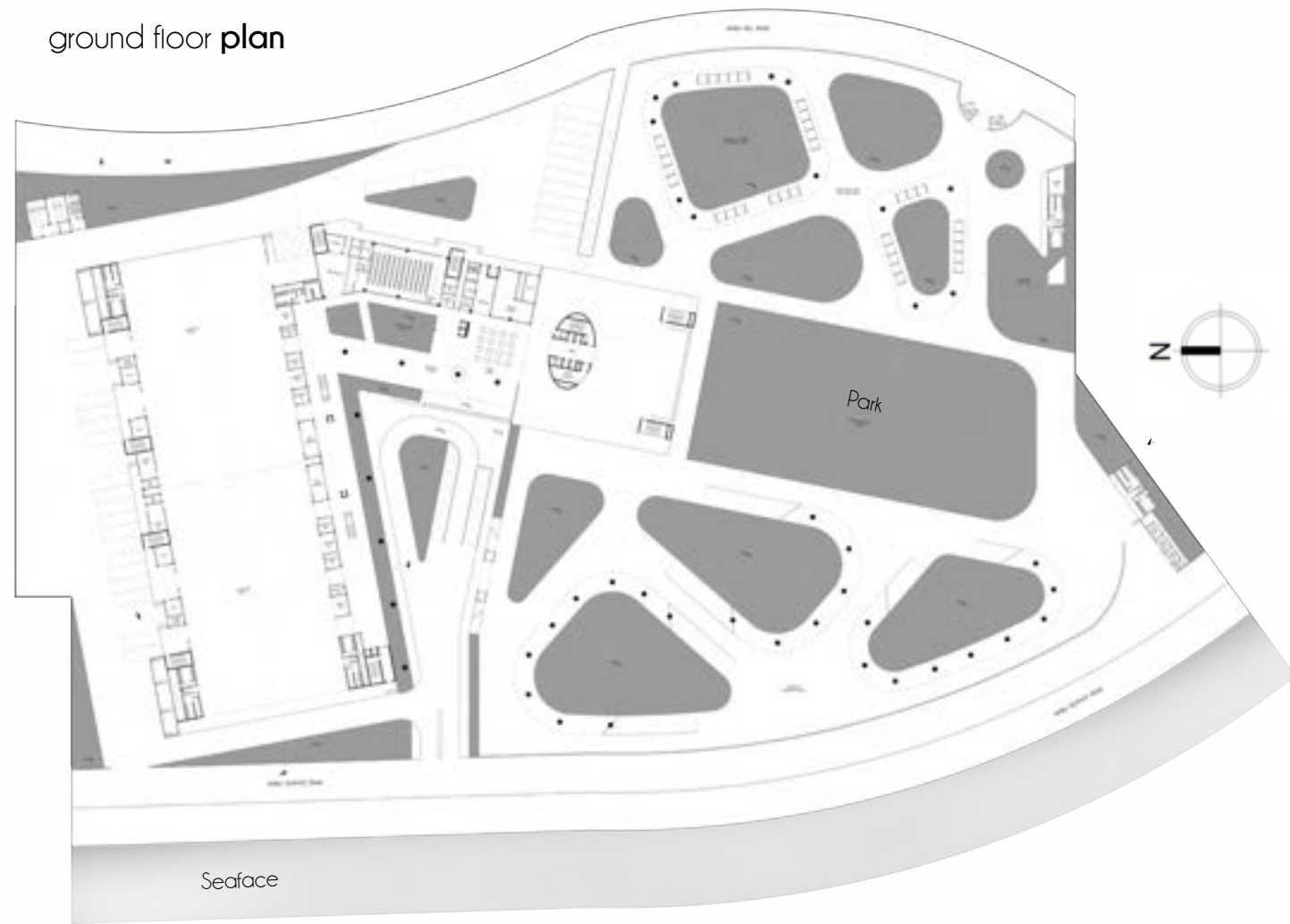
Expansion of infrastructure requires land. The tallest tale about Mumbai is that the city is over congested and the space is in short supply. If land is allotted to infrastructure projects, 'what about breathing spaces?' It is one of the most important thing that this city desperately needs. Both these problems can be addressed to, by designing a solution which can house both, the infrastructure and the breathing spaces under one umbrella.

My thesis is aimed at designing one such solution which will not only aid the flourishing trade industry but will also improve the quality of life of the citizens of Mumbai.

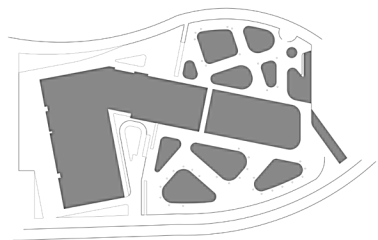


exhibition centre + urban park

Thesis: Final Year B. Arch.
October 2015
Individual Project

ground floor **plan**

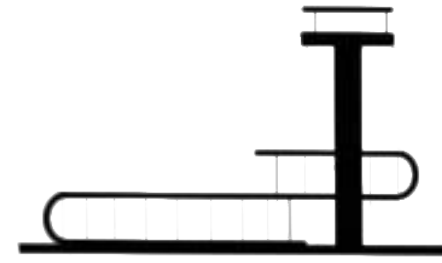
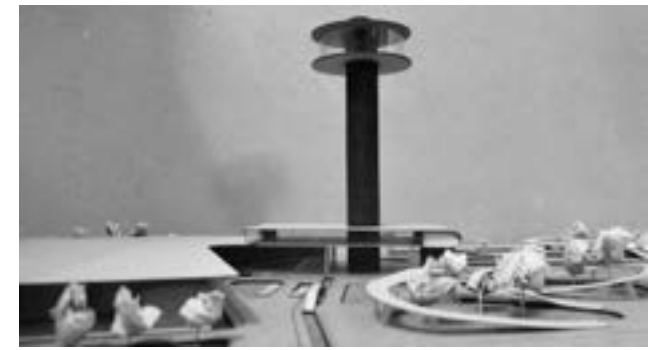
Exhibition Centre and Park

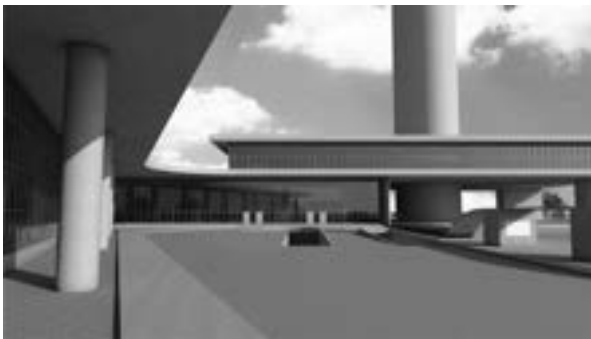
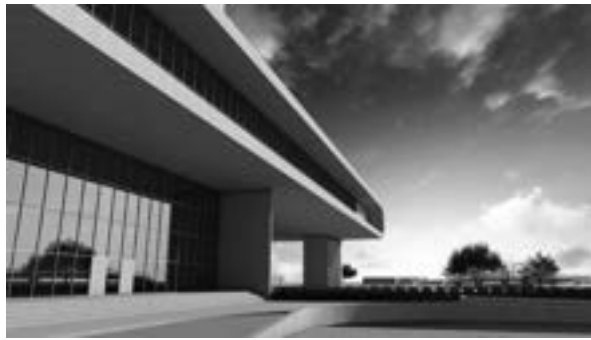


Exhibition Centre expanded into the Park

The design approach was to take advantage of the long sea front and provide stunning views to the users, leading to intervisibility between the park, the exhibition centre and the seaface. To achieve this, the visitor spaces and both the levels of the park were all planned linearly facing the sea..

The massing concept of this design was inspired by a folded sheet of paper held together by a pin. A minimalistic and modern design using concrete, glass and metal was thus created from it.

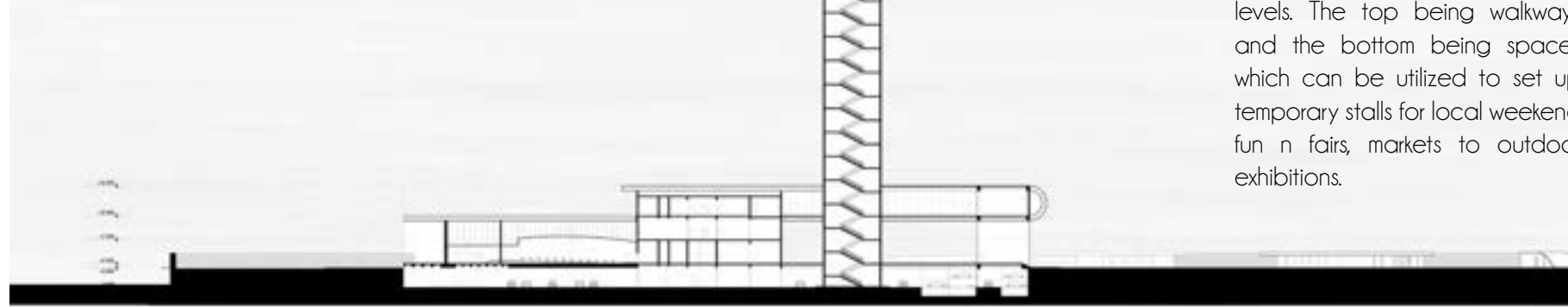
first floor **plan**tower top restaurant **plans**



The roofing for the exhibition halls was done with translucent GFRP sheets and space frames spanning 45m, providing indirect natural lighting with huge and flexible column less spans.



exhibition hall cross **section**



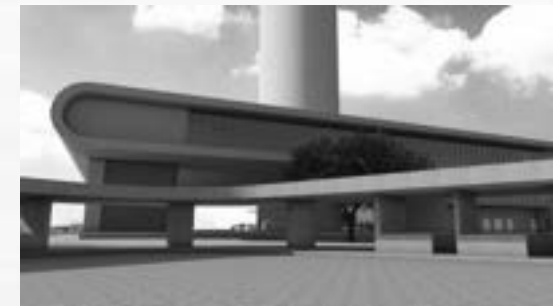
tower & atrium transverse **section**



west **elevation**

The park is designed in two levels. The top being walkways and the bottom being spaces which can be utilized to set up temporary stalls for local weekend fun n fairs, markets to outdoor exhibitions.

The core of the tower was purposely made elliptical in order to minimise waste of space and its orientation provided least resistance to the prominent westerly winds blowing from the sea, thus reducing any air turbulences around the tower.





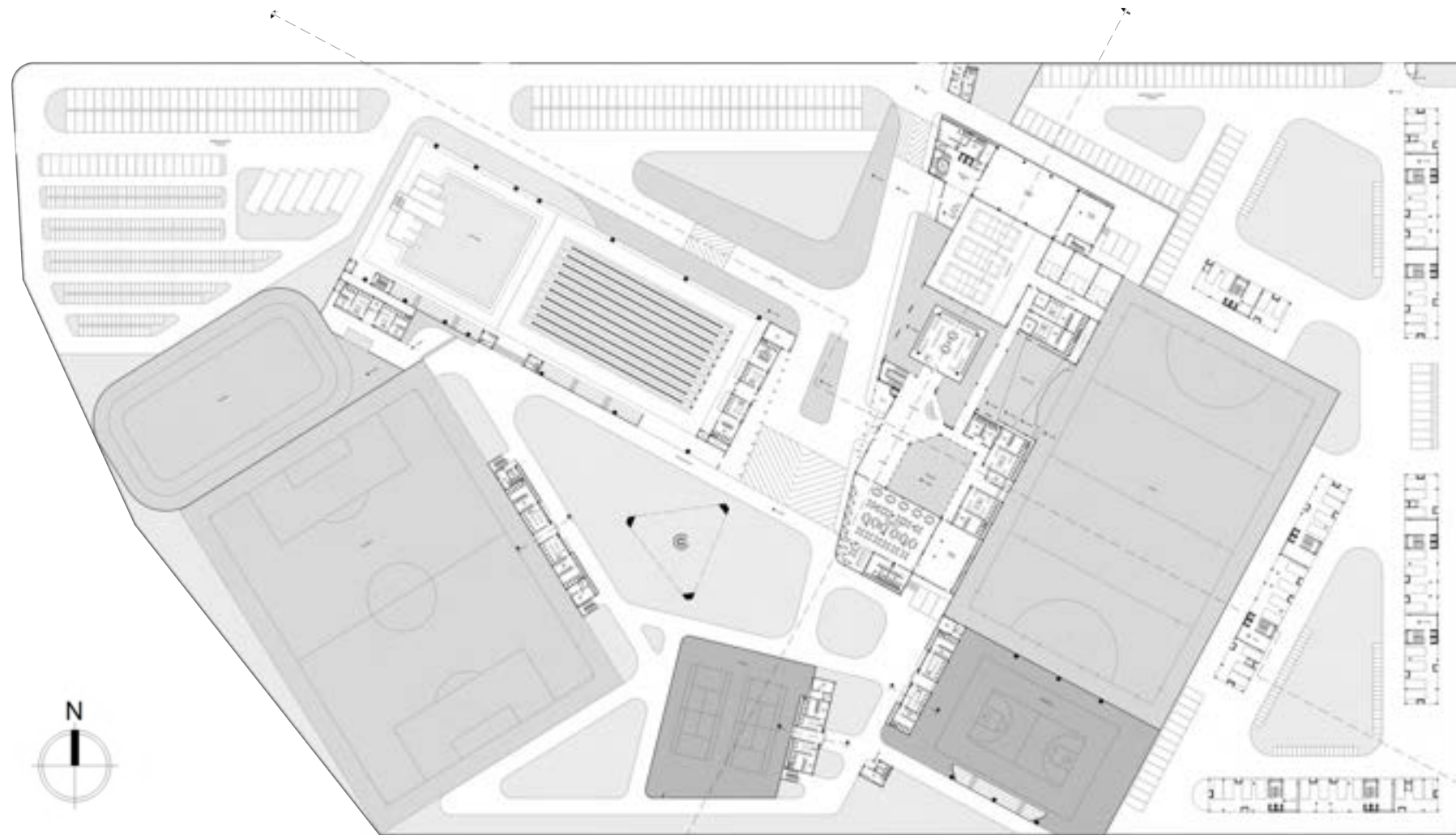
Design Project: Fourth Year B. Arch.
October 2014
Individual Project

sports complex

For my Fourth year Design Studio, I was assigned a problem to design a sports complex with provisions for housing the athletes, at Juinagar, Navi Mumbai.

The surrounding area had no visual obstruction and the plot was adjoining the highway which provided freedom to independently explore the massing of the entire site.

In order to achieve my concept of unity in the diverse activities of the complex, I planned the structure around courtyards and openable atriums. This provided an added benefit to the design by increasing the intervisibility among spaces and penetration of natural light into the structure.

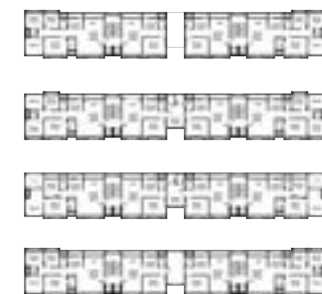
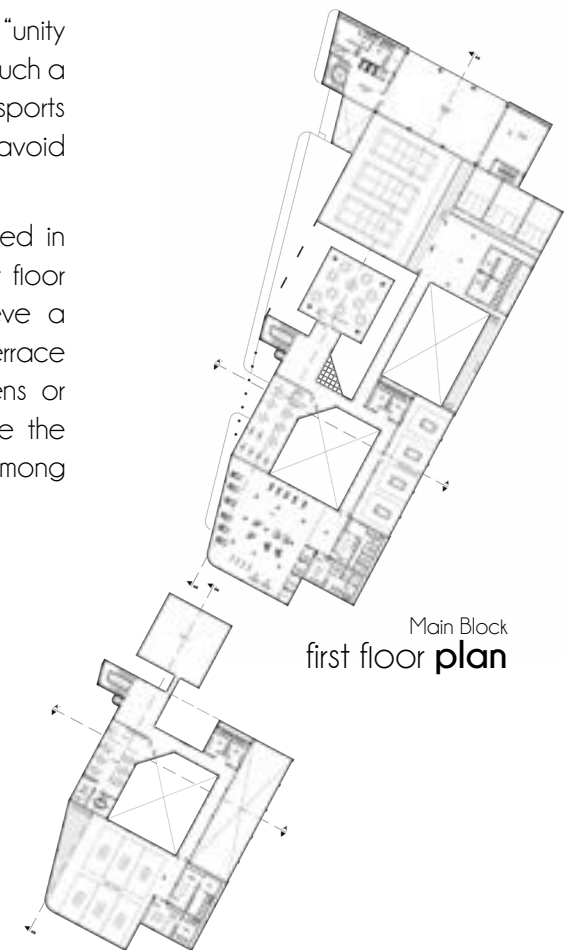
ground floor **plan**

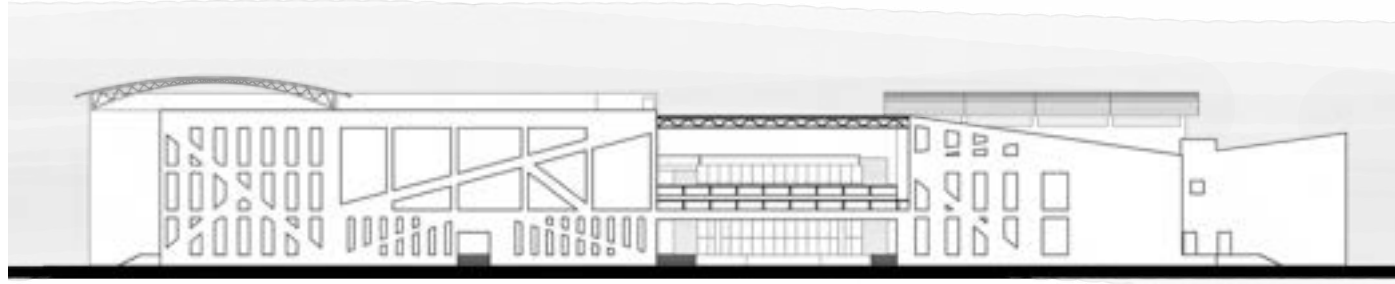
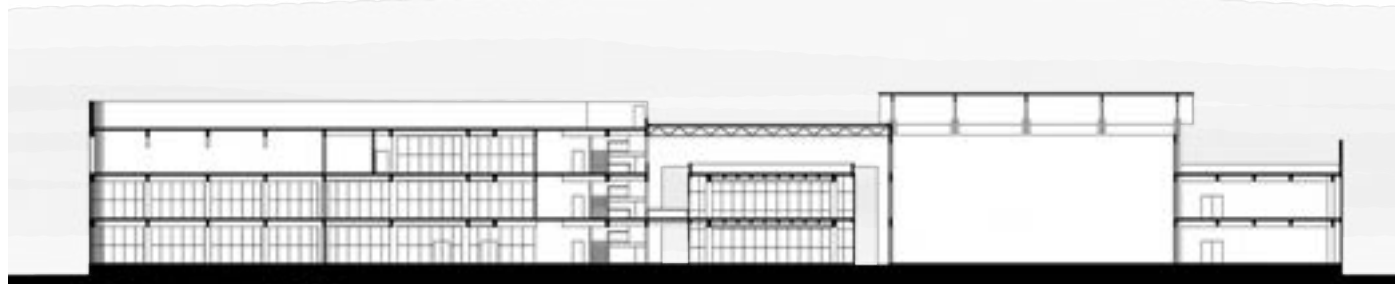
The entire site is connected by motorable roads and ramps, thus making it convenient to access for handicapped people, service and emergency vehicles.

A combination of space frames and tensile roofs is used for covering the swimming pools and the basketball court. This roofing pattern blends in with the massing of the entire site, giving a sense of continuity among the different blocks.

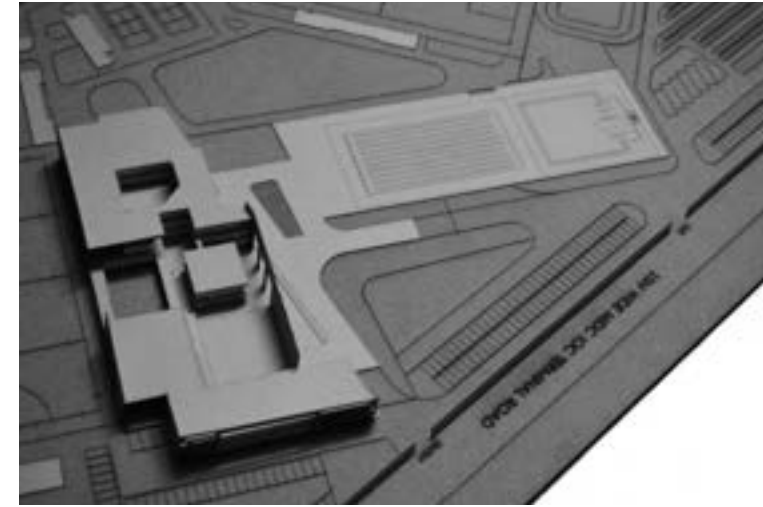
The design concept followed here is the “unity of structures”. The design has progressed in such a way that most blocks belonging to various sports are combined into one single unit so as to avoid excessive travelling between different fields.

The housing complex was also designed in sync with the sports complex. Four different floor plates were designed in order to achieve a massing in which all apartments had a terrace either overlooking the landscaped gardens or the playing fields. This helped me increase the intervisibility and bring a sense of continuity among the two divisions of the site.

residential block floor **plan**Main Block
first floor **plan**Main Block
second floor **plan**north west site **elevation**

main block west **elevation**main block east **elevation**main block longitudinal **section**main block transverse **section**

The elevations of the main block were designed to give a feel of a promenade leading up to its entrance. The elevations have a lot of solids and voids. This pattern helps in maintaining the curiosity of the visitor as it never reveals everything at once.



The structures were deliberately designed to form semi open spaces. This helped in efficient penetration of natural light and aided ventilation thus reducing the overall energy costs of the complex.



The entire sports complex has one common overhead water tank, which was designed in a pyramidal form to complement the skyline of the site and bring a balance between the high residential buildings and the low lying sports complex.

For my Fourth year Design Studio, I was presented with a problem to design a commercial tower in the heart of the commercial hub of Mumbai - the Bandra Kurla Complex. The tower was supposed to house offices of sizes above 1000 sq. m. each and all rules and regulations from the Mumbai DCR were to be followed. Being the focus of the complex, it had to be iconic and innovative, something that Mumbai had never seen yet.

While planning the tower according to the DCR, there was a restriction on the built up area that can be consumed by the tower. This restriction resulted in a short stature of the tower if two offices of 1000 sq. m. each were planned on each floor. To tackle this problem, I designed two different floor plates (1000 sq. m. and 1200 sq. m.) for alternate floors with varying areas that lead to an addition of 40m of height to the tower leading to a more appropriate proportion. An added advantage to this type of arrangement was that two adjacent offices could still be internally connected and each floor could receive adequate amount of natural light.

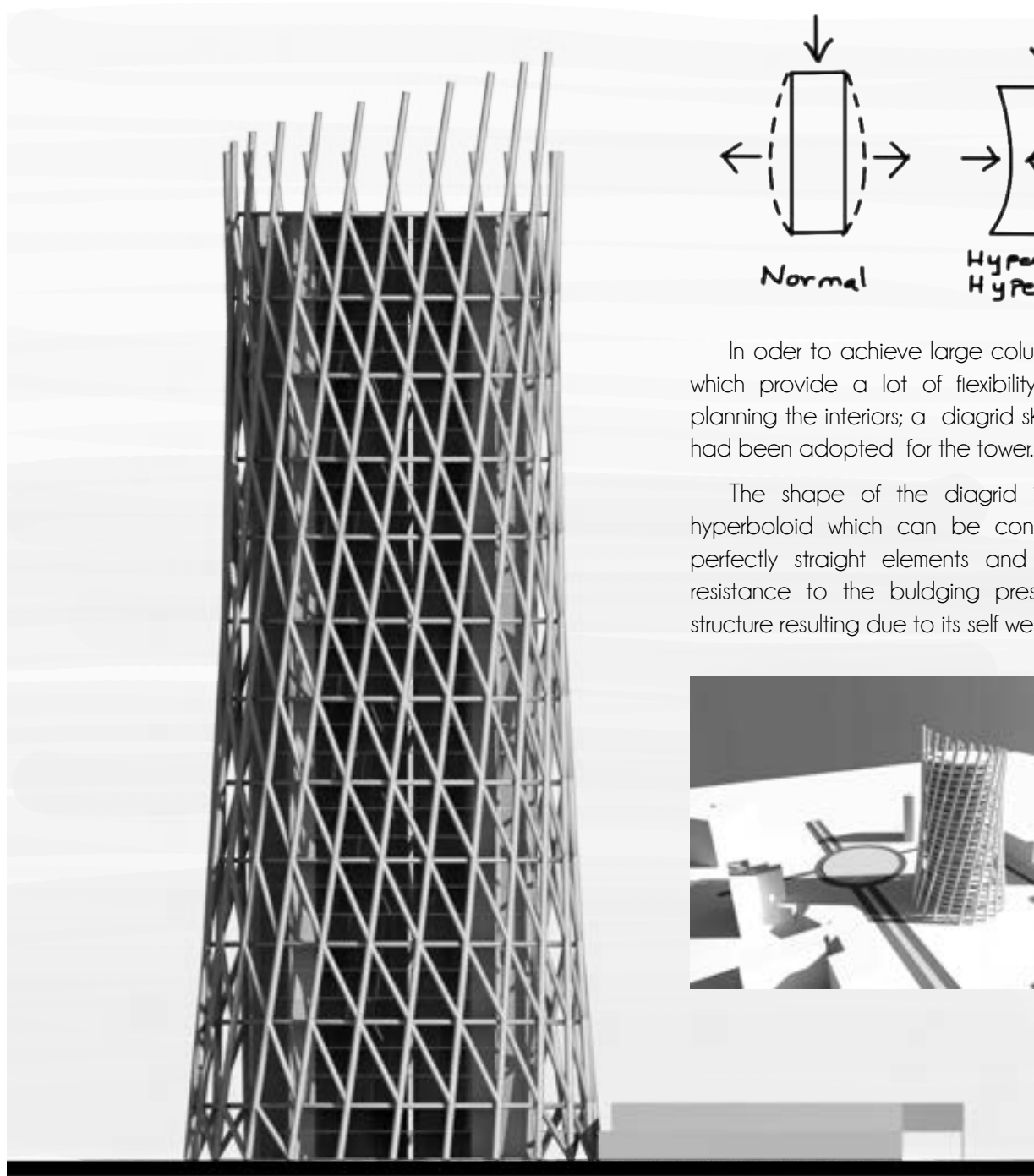


commercial tower

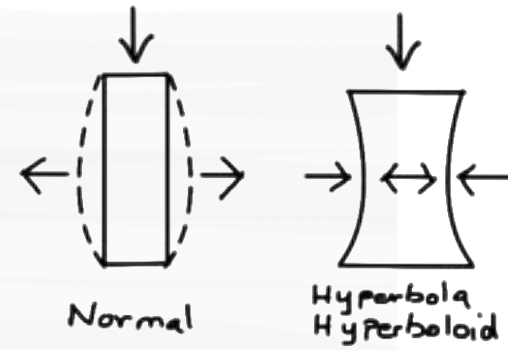
Design Project: Fourth Year B. Arch.

October 2014

Individual Project

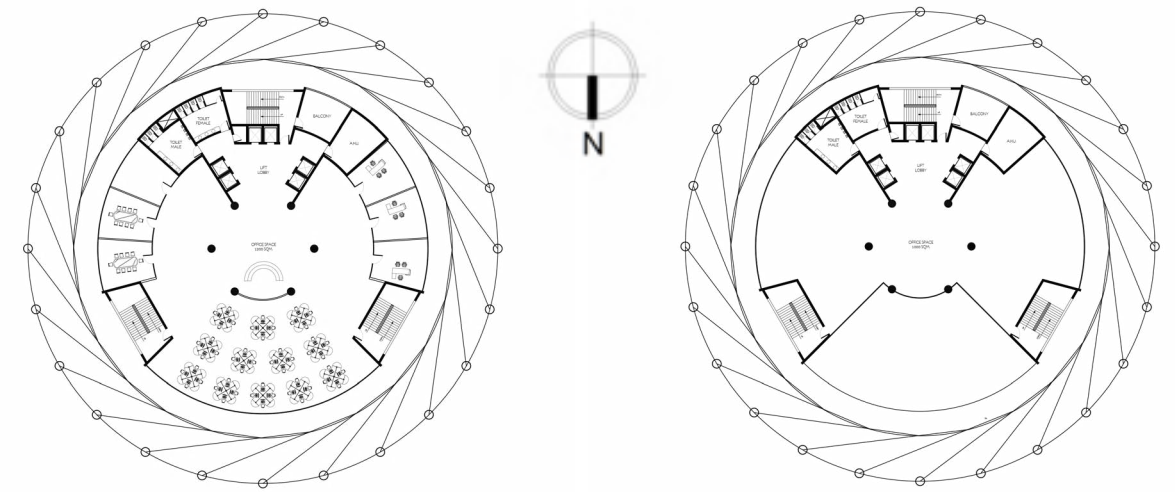
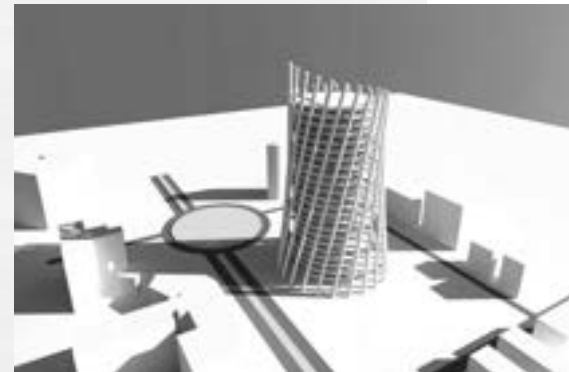


north elevation

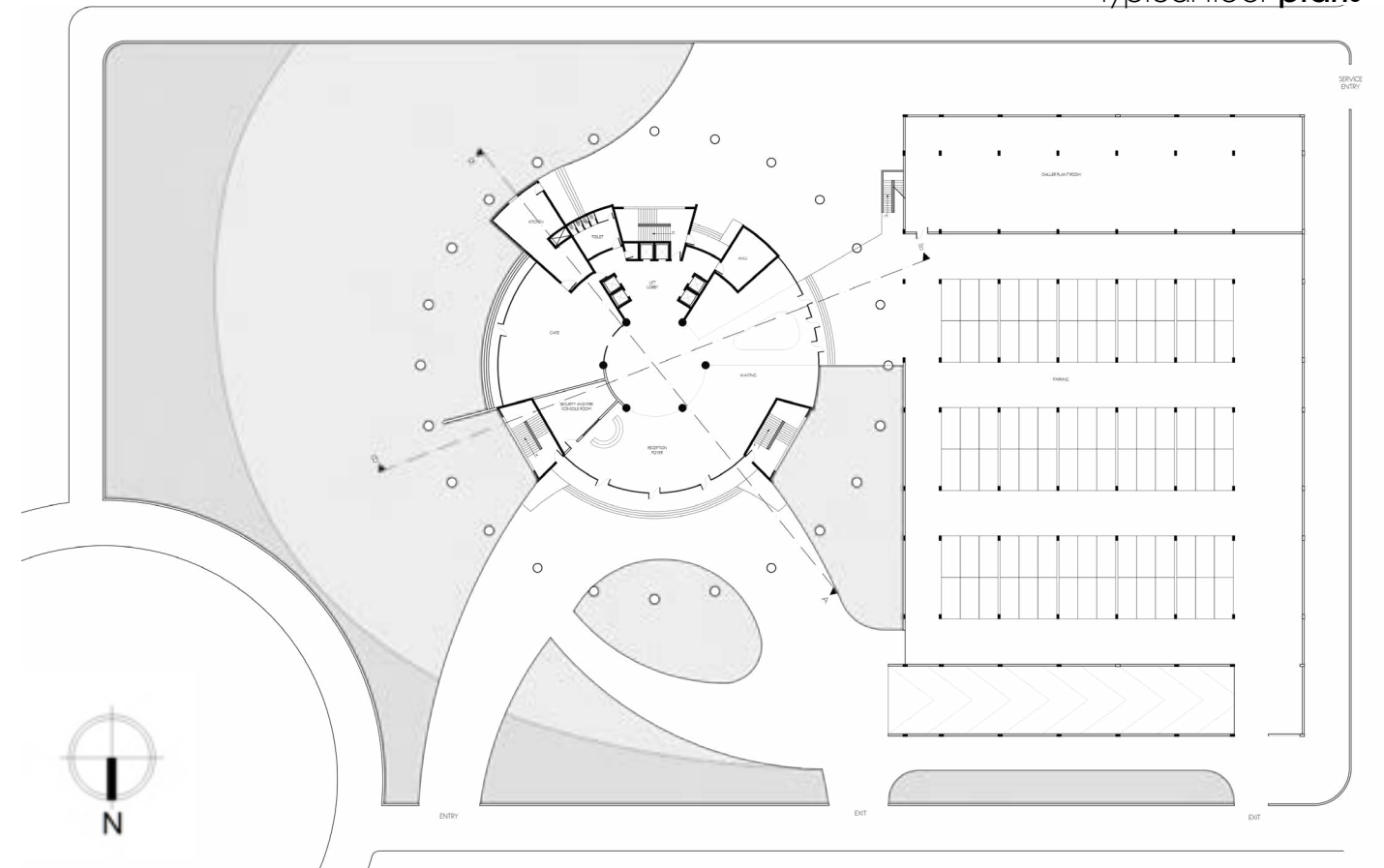


In order to achieve large columnless spans, which provide a lot of flexibility in terms of planning the interiors; a diagrid skeletal system had been adopted for the tower.

The shape of the diagrid is hyperbola hyperboloid which can be constructed with perfectly straight elements and has a high resistance to the bulging pressure on the structure resulting due to its self weight.



typical floor plans



ground floor plan



Design Project: Second Year B. Arch.
April 2012
Individual Project

club house

For my Second year Design Studio, I was given to design a club house in Bandra, Mumbai. The restrictions were to use only load bearing wall systems.

My design uses bricks, concrete and timber to blend the structure with the heritage stone and brick buildings found all over Mumbai.

The design was inspired by traditional Indian Architecture. The use of courtyards and atriums is very common in Indian traditional structures. They provide a significant advantage through natural ventilation and lighting. Thus, reducing the energy costs of the building.

The planning and orientation of the clubhouse is governed by the surrounding climatic conditions. The effect of sunlight was studied in detail in order to achieve maximum natural lighting.



- 09 - Terrace
- 10 - Conference Rooms
- 11 - Banquet
- 12 - Admin
- 13 - Cards Room
- 14 - Pantry
- 15 - Billiards Room
- 16 - Lounge

first floor plan



courtyard & atrium section



south west elevation



- 01 - Entrance Lobby
- 02 - Restaurant
- 03 - Banquet
- 04 - Cym
- 05 - Spa
- 06 - Lounge
- 07 - Squash Court
- 08 - T. T. Room

ground floor plan



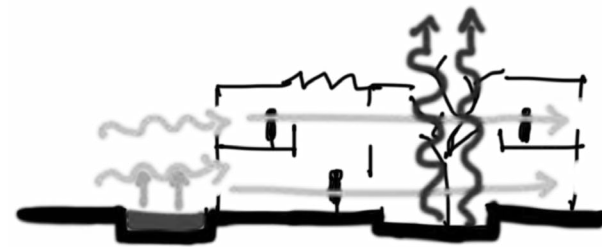


south east **elevation**

I have attempted to play with the volumes of the different spaces within the design. This method helped me give a unique character to each room that complemented its function.



The courtyard and atrium are strategically planned in order to take advantage of the north western winds in Mumbai. The hot air passes over the water body cooling itself and eventually flowing through and cooling the interiors of the structure.



For the massing of the structure, I have been inspired by the principles of modern Architecture. Sharp clean lines augment the bulk of the structure and the difference in levels of the roof creates small openings and leads to a subtle play of natural lights and shadows.



north east **elevation**



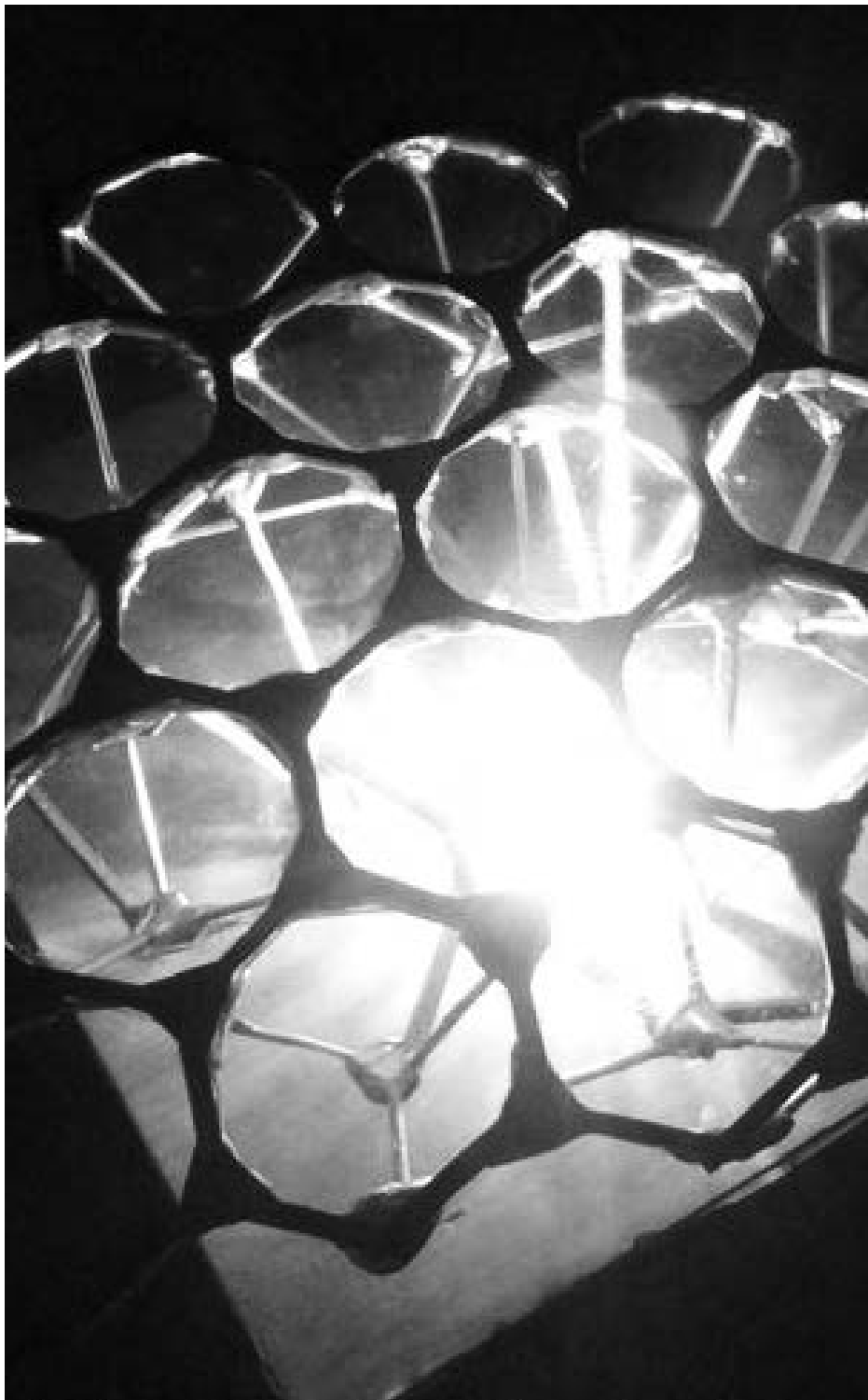
north west **elevation**

“The Roof”

For our First year Creative Workshop Studio, my team of four was presented with a problem to develop a roof using any material of our choice that could practically handle a load of one brick.

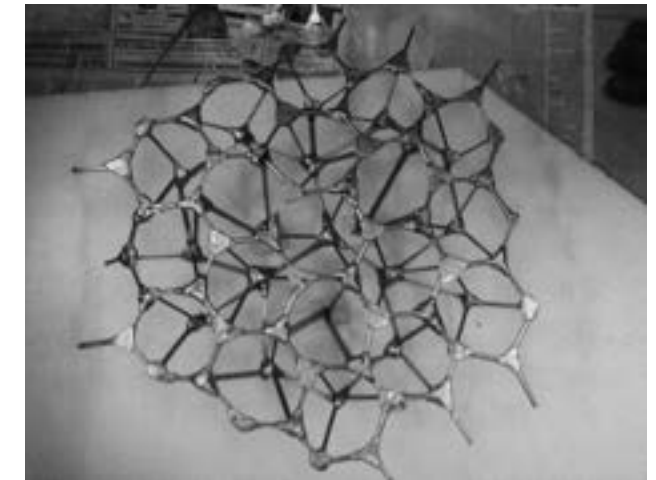
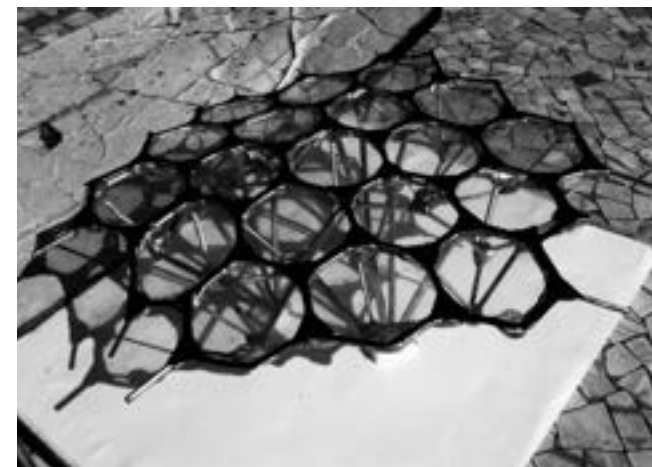
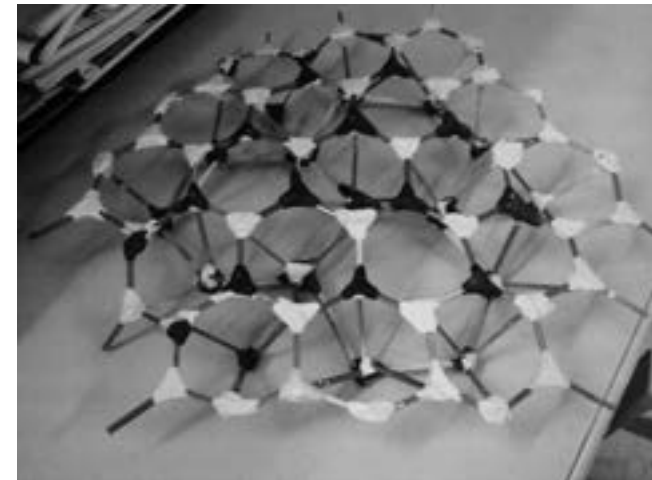
Our inspiration for the design was a “Peepal Tree”. The interesting characteristic about it is that the structure of its trunk can sustain strong winds and substantial amount of load of its huge canopy.

My role in this project was to develop the concept and research methods for construction of the roof.



After studying the load distribution pattern of the tree we arrived at the form for our roof. For designing the roof we used two of the most stable shapes in geometry, the triangle for the truss lattice and hexagon for the roof.

Hexagonal lattices are also found in nature, like honeycombs. This kind of surface helps in evenly distributing any load put over it while using up minimum material to build. This hexagonal pattern also allowed us to introduce slight curvature for easy rainwater run-off.



The entire structure was constructed using broom grass stems for the lattice work and epoxy adhesive and putty to join them. The load of the entire roof was distributed onto three columns which were manually driven into 1 inch thk thermocol to mimic pile foundations.

“Through
my **Lens**”

