

MCG CULTURAL CENTRE

THESIS

Submitted in partial fulfilment of the requirements for the award of
Bachelor of Architecture degree

By

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DEPARTMENT OF ARCHITECTURE

SCHOOL OF BUILDING AND ENVIRONMENT

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

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DEPARTMENT OF ARCHITECTURE

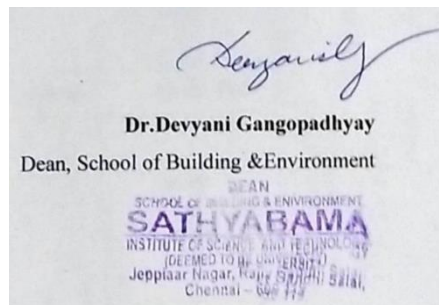
BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **Sanjay S** (3621066) who carried out the project entitled "MCG cultural centre " under our supervision from January 2021 to June 2021.

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ABSTRACT

Culture can be defined as a group of people's or society's ideals, habits, or social behaviour. Culture is a habitual understanding of a specific group of people, including language, religion, food, customs, music, and the arts. The word "culture" comes from a French expression derived from the Latin verb "coloured," which meaning "to tend to the land and flourish, or to cultivate and nurture."

A mixed-use historic complex could be described in this way as a hub for numerous public gatherings, cultural activities, and cultural exhibitions. The demand for the establishment of a mixed-use historic complex and public spaces in the corporate metropolis is sometimes ignored as urban regions expand into metropolitan cultures. As a result, the plan is to establish a link between the city and the cultural complex. To create a cultural landmark for the city of Gurugram, as well.

To create a comprehensive learning space and to implement performing arts spaces for the city's growing artists to perform and develop. The Municipal Corporation of Gurugram has suggested the Cultural Complex for these reasons, in order to make people aware of their culture in India's fast-growing cyber city.

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1. INTRODUCTION

1.1. AIM

To design a mixed-used heritage centre to emphasise the value of culture to the people who are in and around the city and also to create a holistic platform to revive the classical forms and fine arts of the city.

1.2. OBJECTIVE

- To develop a concept based on design criteria
- To implement traditional architecture which can
- To study and design performing arts space
- To create awareness about various culture through built forms and spaces.
- To make the place active by providing dynamic spaces.
- To create a cultural landmark that can also help the artists and performers to learn and showcase their skills which is a major concern in Gurgaon

1.3. SCOPE OF THE PROJECT

- The main scope of this project is to design the landscapes, gathering space where people will interact with each other.
- To understand the present cultural complexes and performing art spaces to create an interconnected design
- The scope of this project is also to make the people aware of their culture as they are being stuck in the fast tech life and also to make them learn new skills and art forms which are based on their culture

1.4. SITE JUSTIFICATION

- This site was picked for its better connectivity from roadways & metro. Gurgaon is also known as the cyber city where it can attract people, families not only from Gurgaon but as well as New Delhi.
- As Gurugram draws tens & thousands of people from Delhi NCR for leisure purposes. Nowadays people are so busy in their fast-moving life where they forget about their culture. This helps to make people mindful of their culture which can make a huge impact on people's lives and society.
- This attempt has been made by the MCG to create a sense of connection between the culture & the people and also to establish a public space with a learning centre and for leisure purposes. Also, Gurugram needs a landmark heritage Complex that the Corporate city demands. Therefore, this project has been proposed by MCG.

TENDERS TO BE FLOATED SOON		
PROJECT MCG CULTURAL COMPLEX		Deadline December 2021
ARCHITECT Design Forum International, New Delhi		Location Sector 53
COST	₹ 170 crore	Area 30,834 sqm (7.62 acres)
Amenities		
➤ Exhibition and other galleries ➤ Library ➤ Restaurant ➤ Canteen ➤ Open-air theater		➤ Auditorium ➤ Academies (music, art and dance) ➤ Pottery workshop ➤ Guest rooms



Fig 1.1 Article stating the requirements for the cultural centre

1.4. METHODOLOGY

SELECTION OF PROJECT AND CREATION OF DESIGN BRIEF



LITERATURE AND CASE STUDY



SELECTION OF SITE



SITE STUDY AND ANALYSIS



ANALYSIS OF PROGRAM AND INFERENCE



AREA REQUIREMENT



ZONING AND SCHEMATIC DRAWINGS



FINAL DRAWING

2. LITERATURE CASE STUDY

2.1 KERALA KALAMANDAPAM

2.1.1. INTRODUCTION

It is situated on a 31-acre plot of land in Thrissur, Kerala. Kerala Kalamandalam is a significant training centre for performing arts in Kerala.

- It was founded in 1931 by Malayalam poet Vallathol Narayana Menon on the banks of the Bharatapuzha river to provide a space for the protection of these kinds of art. It is based on the ancient Indian Gurukula Sampradaya system of residential education.



Fig 2.1 Site plan

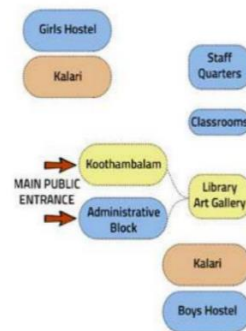


Fig 2.2 Functional Diagram

2.1.2. THE KOOTHAMBALAM

- A pillared hall with a stage where koodiyattam performances take place, the koothambalam is an enclosed hall for performances. The kalamandalam koothambalam is a rare example of a koothambalam that is not placed within a temple complex.
- The Natyashastra, a key text on India's most classical art forms by sage Bharatha, also contains the regulating rules for koothambalam design

- The Natyashastra has stressed the importance of having an exclusive enclosed building for the success of any performance, ensuring a safe and secure environment for the audience to view the performances without being distracted.
- Natyashastra suggests three natyagraha shapes and sizes, as seen in figs 4 and 5. where h = hasta (1 hasta = 720 mm).
- The Koothambalam in Kalamandalam is a Vikrushta-Jyestha hall, which means it is a rectangular hall with a height of 108 feet and a width of 64 feet (roughly 77.8 m x 46.1 m). Because the biggest scale of Natyagraha entails larger plays with multiple characters, this is the case. Koothambalam is a unique example that necessitates ample space for musical instruments.



Fig 2.3 Three shapes



Fig 2.4 Three sizes

- The Ranga-Mandapa is positioned at one end of a raised platform (2) and is typically started from the platform's centre. It stands 0.45 metres above the platform. The Kalamandalam stage, on the other hand, is constrained to the platform's far end to allow for additional seating and observation space. The raised viewing platform was typically reserved for Brahmins, while the Kalamandalam one is open to the general public.
- Non-Brahmin viewers sat or stood in the pillared passageway, known as the prekshagrha, to see the play. While it serves primarily as a circulation route in this location.
- The preparation room, also known as the Nepathya, is a small single room behind the stage that is generally made entirely of wood or brick with wooden jaalis for ventilation. The koothambalam of Kalamandalam has two nepathyas, a corridor, and a green room.

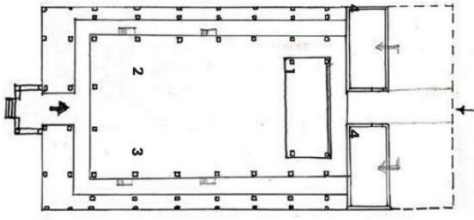


Fig 2.5 Schematic plan of koothambalam

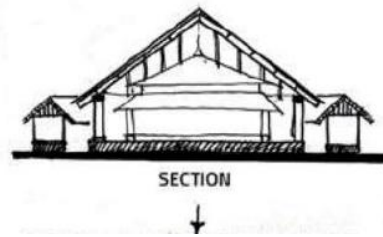


Fig 2.6 Section of koothambalam



Fig 2.7 Prekshagrha



Fig 2.8 Section of koothambalam

2.1.3. THE KALARI

It is a learning area for various art forms, the Kalari, the classroom space in the Kalamandalam, takes on several forms.

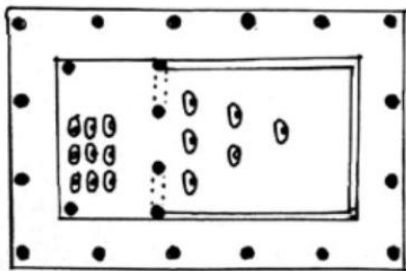


Fig 2.9 Plan of old Kalari

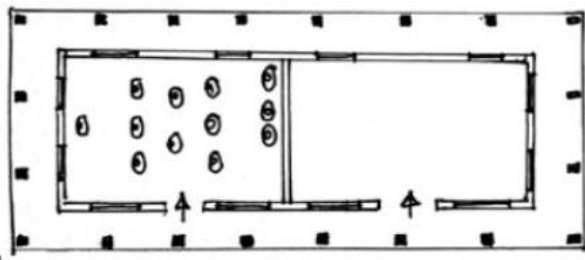


Fig 2.10 Plan of new Kalari

i) **Dance/ theatre/ instruments Kalari:** Dramatic kalaris are rectangular. The guru (teacher), the students performing in front of the guru, the singers (Kathakali sangeetham), and the instrumentalists (Maddalam and Chenda) in the back end all benefit from a clear demarcation of space.

ii) Dance Kalari: The guru, dancers, and vocalists all have their locations in the dance kalaris.

iii) Vocal music kalari :

The schematic plan and section are shown in fig 2.11 and fig 2.12.

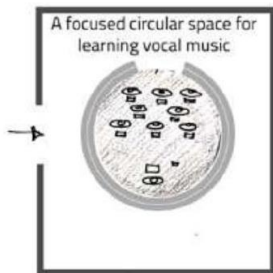


Fig 2.11 Plan of Vocal Kalari

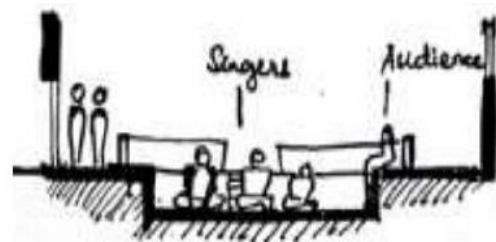


Fig 2.12 Section of vocal Kalari

iv) Kathakali Chutti Kalari:

Kerala's Kathakali is a dance drama. Kathakali Chutti (Makeup) is taught on round earthen pots for practice before being applied directly to the performer as part of Kathakali Vesham (outfit). This Kalari accommodates materials, applications, and displays. A verandah forms a buffer space around the Kalari.

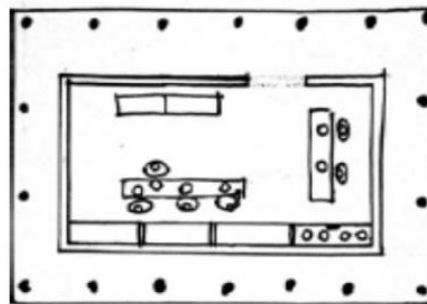


Fig 2.13 Plan of Chutti kalari

v) Kalaripayattu Kalari:

Kerala's Kalaripayattu is a traditional martial art. The learning space for the same is 42 ft x 21 ft in size. There are two kinds of them: 1. Kuzhikalari: This Kalari is four feet underground. The wall of such a Kalari is 1.5 feet above ground level, giving it a total height of 5.5 feet. 2. Nilakalari: This Kalari is elevated above the

earth. They are east-west orientated and have entrances on the east side.

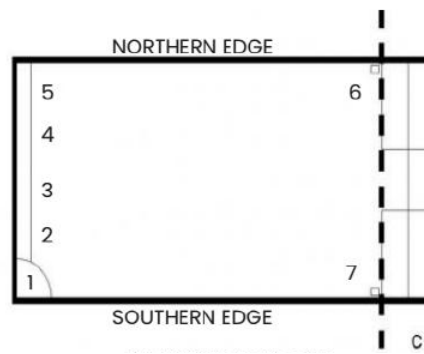


Fig 2.14 Plan of kariyapattu kalari

- 1. Poothara(a 7 tiered structure housing the Kalabhairavan & Kalabhairavi deities)**
- 2. Nagabhagavathi deity**
- 3. Ganapati deity**
- 4. Tripod where past gurus sit**
- 5. Aadimahakalan deity**
- 6. Bhadrakali deity**
- 7. Vetaykkorumakan deity**

2.1.4. THE KOOTHUMADAM

Koothumadam is a shadow play theatre with a permanent high stage measuring 42 feet by 8 feet. The show is watched via a curtain that is partially white and partly black and covers the whole exterior of the theatre.



Fig 2.15 A Koothumadam



Fig 2.16 Behind the Koothumadam

2.2 MUSEUM OF ISLAMIC ARTS

2.2.1. INTRODUCTION

- The Museum of Islamic Art is a world-class collecting institution dedicated to preserving, studying, and exhibiting masterpieces from the Islamic World, which spans three continents and 13 centuries. It is also a centre for information, research, and innovation to serve as a global hub for discussion and cultural exchange.
- I.M. Pei, the architect, found inspiration in the ablution fountain of the Ibn Tulun mosque in Cairo, Egypt. The museum's structure gave an abstract portrayal of major design features of Islamic architecture, embodying the desert atmosphere through its shadows and shades of colour, which the architect aimed to emulate.

2.2.2. SITE PLAN

The Museum of Islamic Art is situated on a man-made island sixty metres from the coast on the south side of Doha's Corniche. The Arabian Gulf to the north and industrial buildings to the east are protected by a new C-shaped peninsula.



Fig 2.17 View from the entrance



Fig 2.18 Aerial view

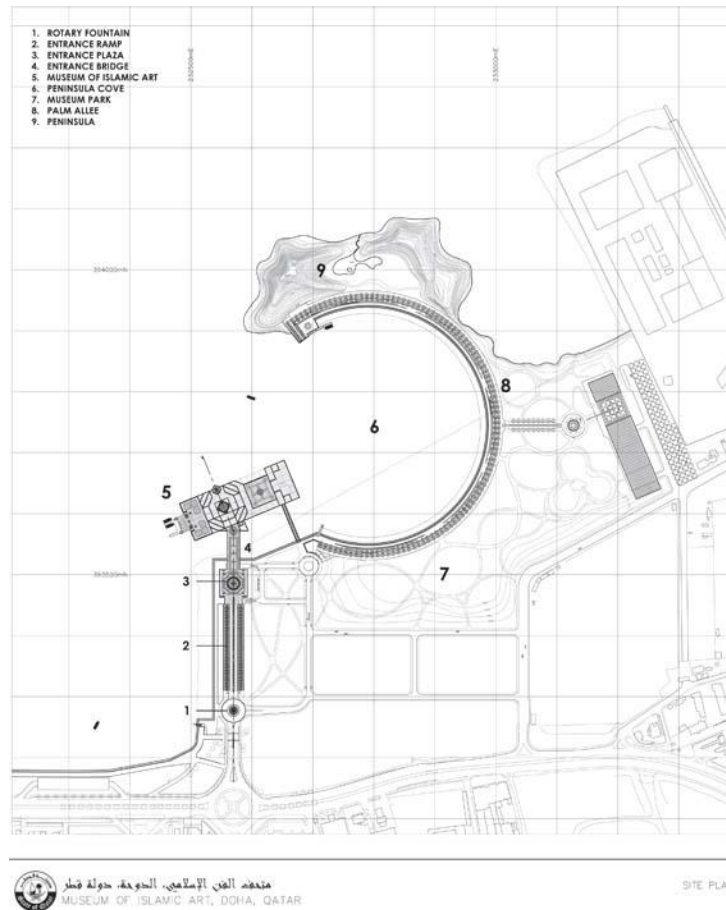


Fig 2.19 Site plan

2.2.3. CONNECTIVITY

The site is at one of Doha's most desirable areas and is well-connected by multiple forms of transportation.

i) Air: The Museum is located 13 kilometres from Doha's Hamad International Airport. The museum is accessible by a vehicular dropoff that connects to a pedestrian bridge going to the museum's entrance, which is located along Al Corniche Street, one of Doha's main roadways connecting the residential districts in the south to commercial areas near the Doha harbour.

ii) Metro: The museum is only a short walk from the Souq Waqif metro station on Qatar Rail's Gold Line. The museum is within walking distance of the Fishing Port and Souq Waqif bus stations.

2.2.4. RESPONSE TO THE SITE

The museum's location on an island was chosen to create an ambience separate from the bustle of the main street.

2.2.5. BUILDING PROGRAM

- Permanent gallery space -3700 sqm
- Temporary gallery space – 750 sqm
- Study galleries – 375 sqm
- Education wing – 2700 sqm
- Library – 820 sqm
- Conservation lab – 400 sqm
- Collection storage - 1800 sqm
- Auditorium (197 seats) – 430 sqm
- Restaurant – 380 sqm
- Gift shop – 300 sqm
- Museum park (including peninsula)- 26 ha

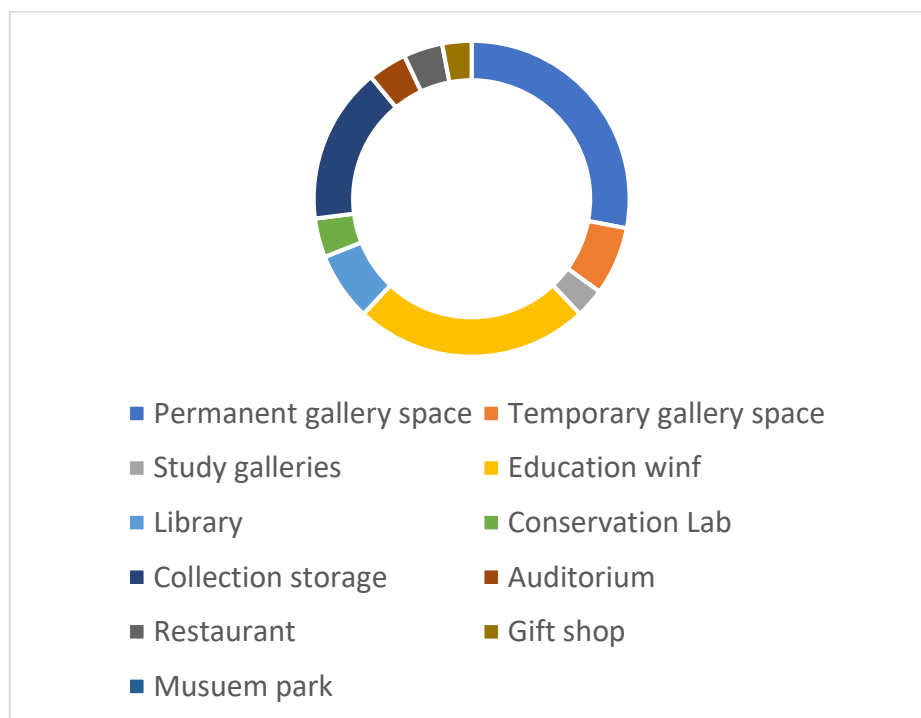


Fig 2.20 Distribution of spaces

The museum's collections on science, pattern, calligraphy, the Figure in Art, Turkey (16th-19th C), India (16th-18th C), Iran (16th-19th C), Iran and Central Asia (12th-16th C), Egypt & Syria (12th-15th C), and Early Islamic Art are housed in the permanent exhibition areas (7th-12th c). A reading room, classrooms, workshops, study spaces, and technical and storage facilities make up the education wing.

2.2.6. ARCHITECTURE

- The museum's design is influenced by many abstractions of Islamic building, materials, and symbols. The complex's layout is influenced by Islamic symmetry and paradise gardens (Chahar-bagh), which are recreated as a courtyard with four water bodies.
- The ceiling is an octagon that tessellates upwards to form a square, and an octagon is also a repeated form throughout the building. The structure is octagonal in shape.
- The Museum is made up of two cream-coloured limestone buildings joined by a central courtyard: a five-story main structure and a two-story Education Wing.
- The angular volumes of the main building step back as they rise around a 5-story high domed atrium, which is hidden from view by the walls of a central tower. Within the faceted dome, an oculus at the top of the atrium collects and reflects patterned light.

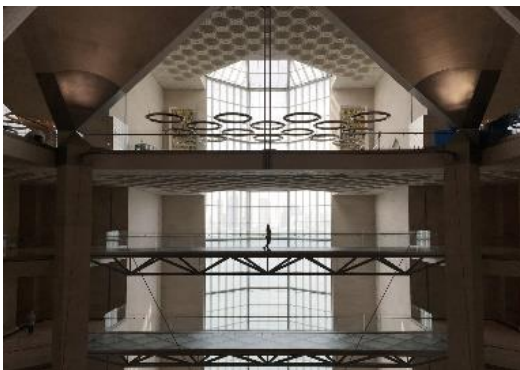


Fig 2.21 Interior view of the levels

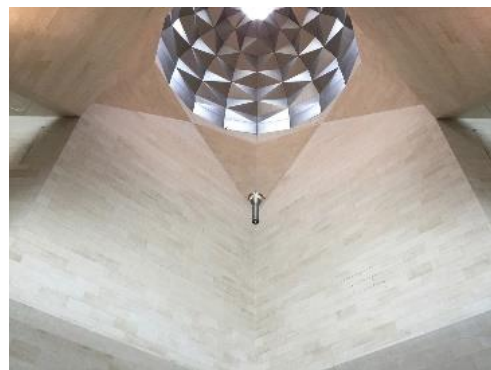


Fig 2.22 Interior view of the dome

2.2.7. FLOOR PLANS

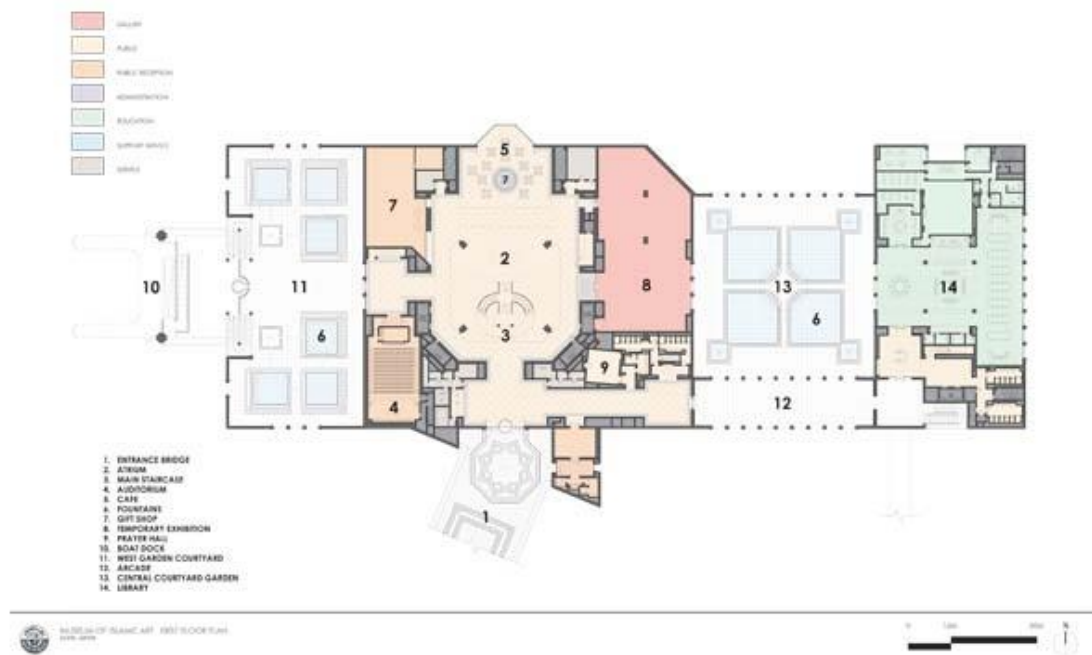


Fig 2.23 Ground floor plan



Fig 2.24 First floor plan

- | | |
|--------------------|----------------------|
| 1. Entrance bridge | 8. Auditorium |
| 2. Atrium | 9. Central courtyard |
| 3. Gallery | 10. Arcade |
| 4. Main staircase | 11. West courtyard |
| 5. Atrium bridge | 12. Office |
| 6. Restaurant | 13. Prayer room |
| 7. Education wing | 14. Boat dock |

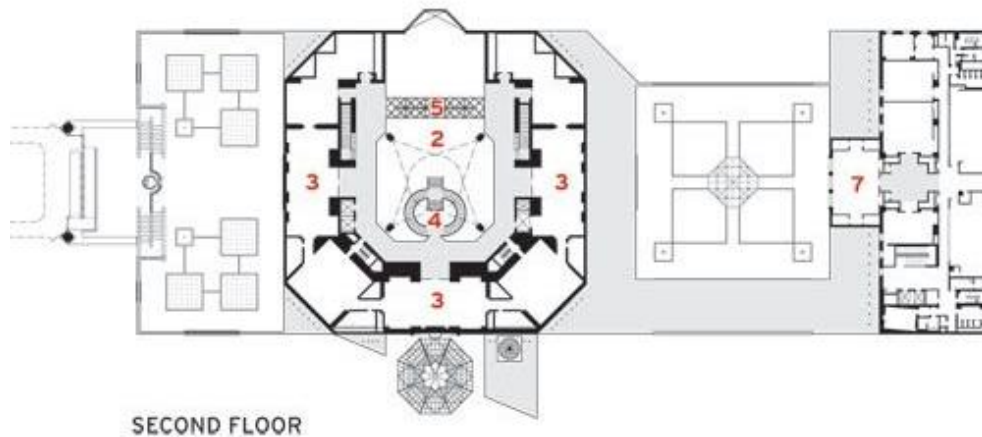


Fig 2.25 Second floor plan

- | | |
|--------------------|----------------------|
| 1. Entrance bridge | 8. Auditorium |
| 2. Atrium | 9. Central courtyard |
| 3. Gallery | 10. Arcade |
| 4. Main staircase | 11. West courtyard |
| 5. Atrium bridge | 12. Office |
| 6. Restaurant | 13. Prayer room |
| 7. Education wing | 14. Boat dock |

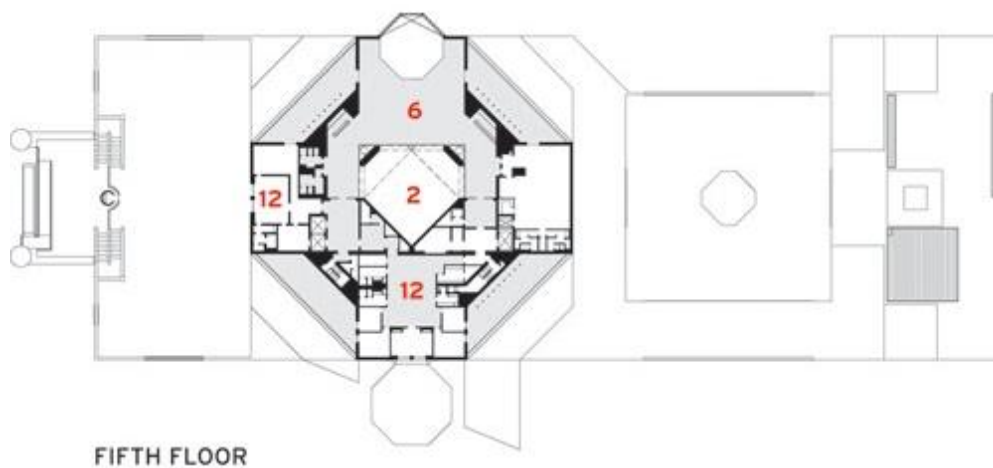


Fig 2.26 Fifth floor plan

- | | |
|--------------------|----------------------|
| 1. Entrance bridge | 8. Auditorium |
| 2. Atrium | 9. Central courtyard |
| 3. Gallery | 10. Arcade |
| 4. Main staircase | 11. West courtyard |
| 5. Atrium bridge | 12. Office |
| 6. Restaurant | 13. Prayer room |
| 7. Education wing | 14. Boat dock |

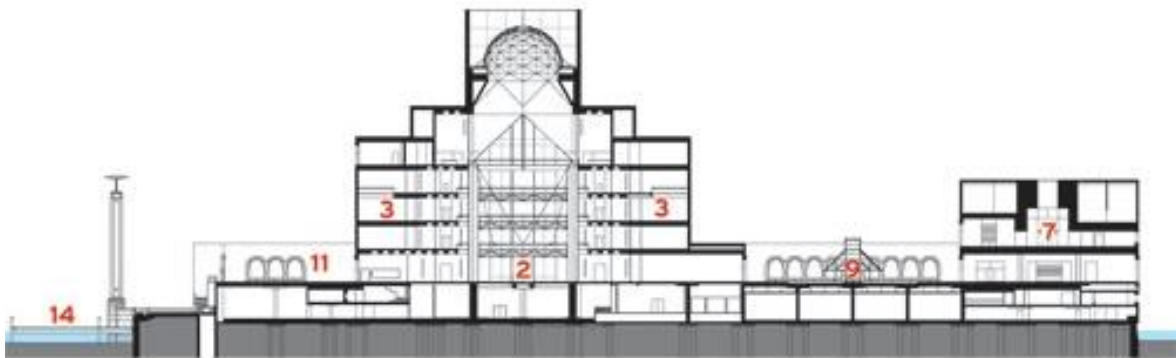


Fig 2.27 Sectional view of the building



Fig 2.28 Doha skyline and arches



Fig 2.29 Café seating north

2.3 INDIA HABITAT CENTER

2.3.1 SITE

- The India Habitat Centre was created as a platform for institutions working in the field of habitat improvement to collaborate in a synergetic way. To maximise their efficacy, the concept incorporates urban design into a synergetic inter-relationship between institutions. It combines work, commercial, and social spaces to create a unified urban physical form with shared amenities.
- The Meera Marg on the west, the Lodhi road on the north, and the Vardman Marg on the south flank the L-shaped site on three sides. It has a mix of educational/institutional and residential land uses on both sides.



Fig 2.30 View of the centre

2.3.2 CONNECTIVITY

- The site is located in one of Delhi's most desirable areas and is conveniently accessible by most kinds of transportation. The Safdarjung Airport is a private airport. Roads: Sri Aurobindo Marg, which connects South Delhi to the Rajpath; Lodhi Road, which connects Sajdarjung and Humayun's Tomb; and the Barapullah, which connects West and East Delhi. Metro rail: Jor Bagh Yellow line station and JLN Stadium Violet line station. Railway: Lodhi Colony, Sewa Nagar, and Lajpat Nagar stations are all close by.

2.3.3 RESPONSE TO THE SITE

- The site's perimeter roadways are characterised by free-flowing traffic and little pedestrian activity. The IHC is an inward-looking structure with automobile traffic on the exterior and pedestrian activity and open space on the interior.

2.3.4 BUILDING PROGRAMME :

- The India Habitat Centre is a medium-density facility with institutional and office space, conference and library facilities, and a variety of member services, including:
- 40,000 square metres of office space 60 guest rooms, 5 suites, and 5 service apartments with a total capacity of 1000 people in various configurations. | 55 guest rooms, 5 suites, and 5 service apartments with a total capacity of 1000 people in various combinations.
- 1500-person capacity conference rooms, canteen, restaurants, and private dining rooms | 700 square metres of exposition space | 420-person capacity auditorium, 250-person capacity Amphitheatre
- Parking for 933 automobiles and 2000 two-wheelers | 25% of the total area is dedicated to landscaped courts.

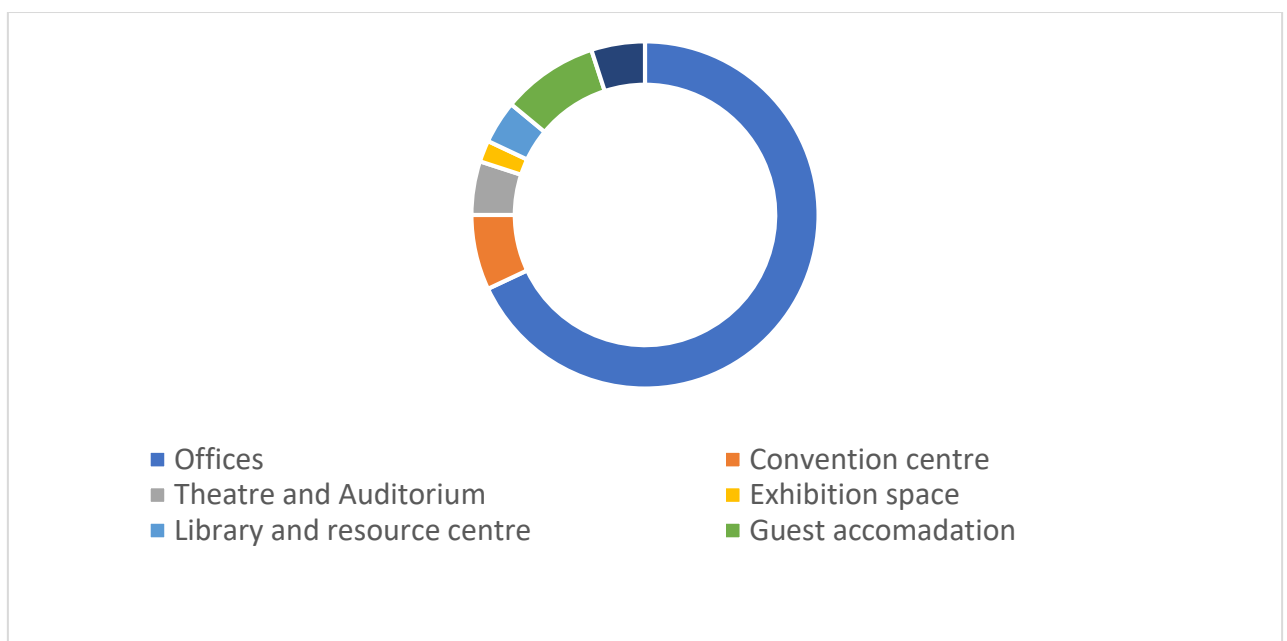


Fig 2.31 Spatial distribution

2.3.5 ARCHITECTURE

- Joseph Allen Stein described himself as a "horizontal architect with a deep disdain for automobiles and the need for climate change," two concepts that have resulted in two significant design implications: the building of a highly pedestrianised interior realm and the employment of passive solutions to counterbalance energy demands. This, together with the surrounding scenery, has created an oasis of green and an escape from the city's bustle right in the heart of it. Materiality is crucial in sustaining a sense of habitat in the space; a palette of reddish browns, greens, and marine blues intuitively connects the visitor's mind to nature.
- To create a dynamic pedestrian experience in the complex, Stein uses levels and varied scales. The open space to surrounding building height ratio is sufficient to make it appear substantial but not threatening. The vast spaces create a sense of openness within the buildings and serve as breakout areas for the neighbouring office and convention facilities. All buildings have public functions on the ground floors. The degree of privacy rises as one ascends the ladder, with the most private functions located at the top. This generates a larger public domain that extends through and out of ground-floor structures.



Fig 2.32 Landscaping around the structure



Fig 2.33 Use of brick with greenery

2.3.6 BLOCK DIVISION

- The complex is divided into two main blocks:
- The North Block, which runs parallel to Lodhi Road, has seven stories of office space, with the lowest floors open to the public.
- The auditorium, theatres, library, member facilities, and guest rooms are all located in the South Block, which runs parallel to the Lodhi Colony. On this edge, the building bulk is also placed back further from the storey.

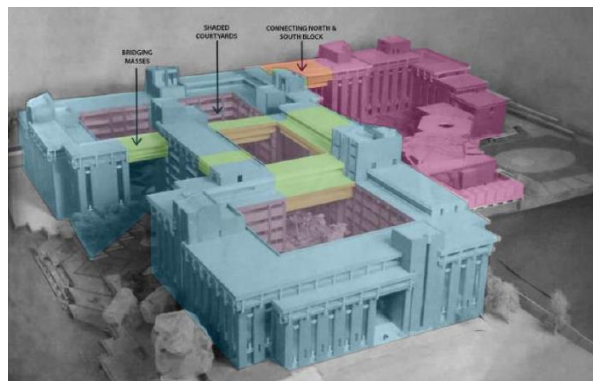


Fig 2.34 North block in the blue and south block in pink

2.3.5 SPATIAL ORGANIZATION

- The habitat centre is divided into four to seven-story blocks that are connected by shaded courtyards. The structures are organised around climate-controlled courtyards that are shaded by overhanging sunscreens and planted by gardens.
- Spaces are divided into categories based on how public they are. However, there is a limited connection between office workers and the activities in the courtyard, due to the existence of horizontal windows rather than vertical windows, which is one of the reasons for this.

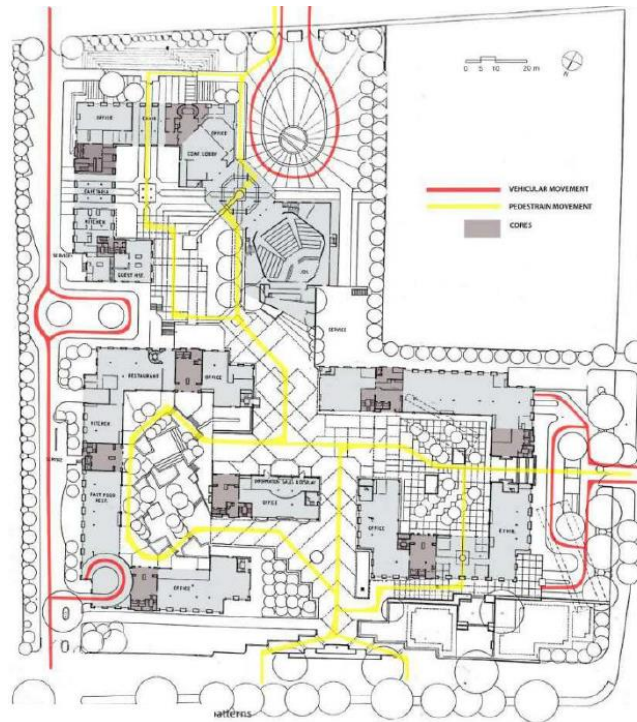


Fig 2.35 Ground floor plan showing circulation

2.3.5 SUSTAINABILITY AND ENERGY EFFICIENCY

- A blue sunshade placed between two buildings in a court serves to keep the surroundings cool and comfortable. During the day, they act as a jaali, providing intriguing shading patterns.
- Trees and water in the landscaping serve to chill the microclimate.
- Rooftop photovoltaic arrays help to offset a huge number of electricity demands.
- An on-site STP recycles grey water and puts it to good use in the garden.

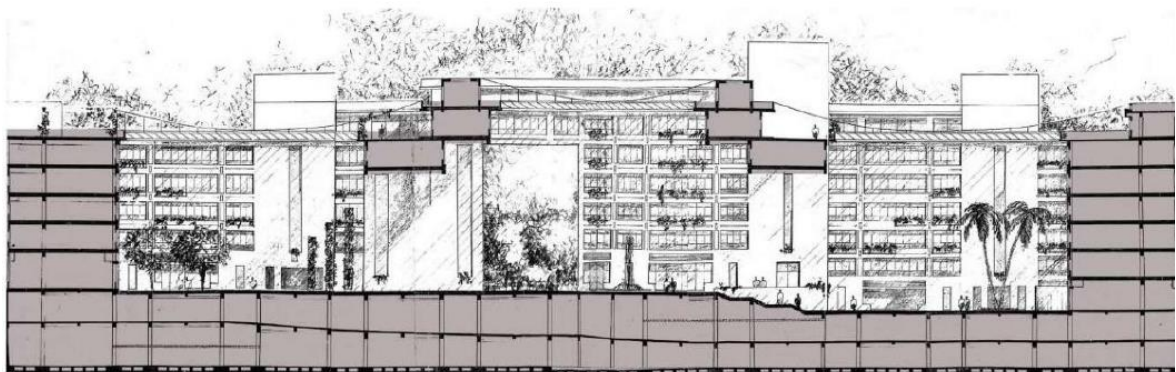


Fig 2.36 Section showing courtyards and spaceframes

2.3.5 SERVICES

i) Basement: The second basement is used for services and other facilities, including:

- Fire pump room
- Chiller plant room (water-cooled)
- Water pump-rooms for hard and soft water • DG room with a diesel tank and supply connection to ground
- Transformer (dry-type)
- CO2 tanks for firefighting
- Electrical panel room with smoke detectors and CO2 dispensers
- 8. Office storage rooms
- The total area occupied by HVAC + electrical services is 14m x 20m = 800 sq.m., of which 700 sq.m. is occupied by HVAC.
- 100 sq. m. of electrical services
- The basement is equipped with CO2 fire-fighting systems due to the presence of electrical equipment and machinery.

ii) Ground :

The security room and the BMS room are located in Building Core 5A. The security room features workstations and CCTV camera displays for constant monitoring, while the BMS room has BMS panels and BMS engineers' workspaces. The on-site STP is similarly on the ground level, near the complex's Gate 3. It filters greywater and discharges it into the water supply for landscaping and gardening.

iii) Floor: Each floor is equipped with three AHUS, as well as electric (HV, LV) shafts and fire risers.

iv) Terrace: The security room and the BMS room are located in Building Core 5A. The security room features workstations and CCTV camera displays for constant monitoring, while the BMS room has BMS panels and BMS engineers' workspaces.

- The complex's on-site STP is also on the ground level, at Gate 3. It recycles greywater for use in landscaping and gardening.

2.4 NATIONAL CENTRE FOR PERFORMING ARTS

2.4.1 INTRODUCTION

- India's premier cultural institution is Mumbai's National Centre for the Performing Arts (NCPA). In South Asia, it was the first multi-venue, multi-genre cultural centre to be established. Each year, the NCPA holds over 700 events, making it India's largest and most comprehensive performing arts centre.
- NCPA's iconic theatres are the best in the country for modern performances, requiring no acoustic amplification and featuring the proper layouts for events to run well. To construct the best performance space complex in the country, architect Philip Johnson drew on his experiences while designing the Lincoln Center in New York, USA, while acoustician Cyril Harris drew on his skills from the Kennedy Center for the Performing Arts in Washington (Chriss, 1981).



Fig 2.37 Aerial view of NCPA

2.4.2 SITE CONDITIONS

- The facility is bordered by high-rise office skyscrapers and hotels and is built on 32,000 square metres of reclaimed land at Nariman Point. Marine Drive, the coastal promenade to the north-west, is a popular hangout spot for Mumbai residents.

2.4.3 RESPONSE TO SITE

- The complex's buildings are placed back from the public access lines on the northwestern and northeastern boundaries. In nature, it is inward-looking and does not respond much to its surroundings since it aims to build a self-environment away from the hustle and bustle.
- Due to a high boundary wall, the buildings are barely visible from their periphery roadways and have a little aesthetic impact on the cityscape. However, it has taken advantage of its expansive seafront by providing spacious foyers and sea-view rooms throughout the complex, which provide breathtaking views of the sea. The NCPA apartment building, which stands beside its tall neighbours along Marine Drive, is notable for its prominence along the street line.



Fig 2.38 View of the front side

2.4.4 MAJOR COMPONENTS

- Corporate office
- Library and Stuart-life collection
- Little theatre
- West and east room
- Box office
- Jamshed baba theatre
- Basement parking
- Cafeteria
- Sea view room
- Tata theatre
- Membership department
- Amadeus
- Central open air space
- Piramal art gallery
- Experimental theatre
- Godrej dance theatre



Fig 2.39 Site plan of the complex

2.4.5 ARCHITECTURE

- The NCPA theatres are the best performance venues in India, hosting over 700 venues.

Sl. No.	Venue Name	Year of Opening	Description	Seats	Other facilities	Events hosted
1	Jamshed Bhabha Theatre	1999	Proscenium theatre	1109	Historical marble staircase, double level foyer	Technically complex performances such as opera, ballet and musicals
2	Tata Theatre	1982	Fan-shaped amphitheater without proscenium	1010	Revolving stage, sea-view foyer, excellent acoustics	Chamber music concert, dance, drama and film screening
3	Experimental Theatre	1986	Modular Studio theatre with 3 galleries	267	Configurable staging and seating for experimental productions.	Innovative theatre productions, small-scale dance and music performances, classes and workshops
4	Little Theatre	1975	Proscenium type theatre with house curtain	112	Recording studio and listening area	For new artist performances, film screenings, talks and seminars
5	Godrej Dance Theatre	1987	Proscenium type theatre with house curtain	177		Dance performances, classes, workshops, film screenings, lectures and seminars.

Fig 2.40 Comparison of the venues

2.4.6 MATERIALITY

- While Malad is used extensively on the exteriors, the interiors feature rich maroon carpeted steps, wood panelling, and acoustic boards and panels on the walls and ceilings. The JB theatre's ceiling is adorned with a glass chandelier.



Fig 2.41 Experimental theatre



Fig 2.42 JB theatre



Fig 2.43 Tata Theatre

2.5 HEYDAR ALIYEV CENTER

2.5.1 INTRODUCTION

- Baku's architecture and urbanisation as part of the former Soviet Union. Azerbaijan's capital, Baku, on the western bank of the Caspian Sea, was severely impacted. Azerbaijan has worked hard to modernise and improve Baku's foundation and design, breaking with its history of policing Soviet Modernism.
- The Center, which is meant to become the central building for the country's social undertakings, departs from Baku's inflexible and uniformly superb Soviet design, instead of attempting to transmit Azeri culture's sensibility and the country's idealism.



Fig 2.44 Bird's eye view of the centre

2.5.2 CONCEPT

- The Heydar Aliyev Center's plan establishes a constant, seamless relationship between the structure's encircling plaza and its interior.
- The plaza, as the ground surface, rises to embrace a similarly open interior space and characterise a grouping of function spaces dedicated to the aggregate celebration of contemporary and traditional Azeri culture, which is open to everybody as a characteristic of Baku's metropolitan fabric.

- Undulations, bifurcations, folds, and enunciations, for example, transform this court surface into a structural scene that performs a wide range of functions, including inviting, grasping, and coordinating guests through various degrees of the inside.
- The structure conceals the traditional distinction between architectural object and metropolitan scene, building envelope and metropolitan court, figure and ground, inside and outside with this gesture.

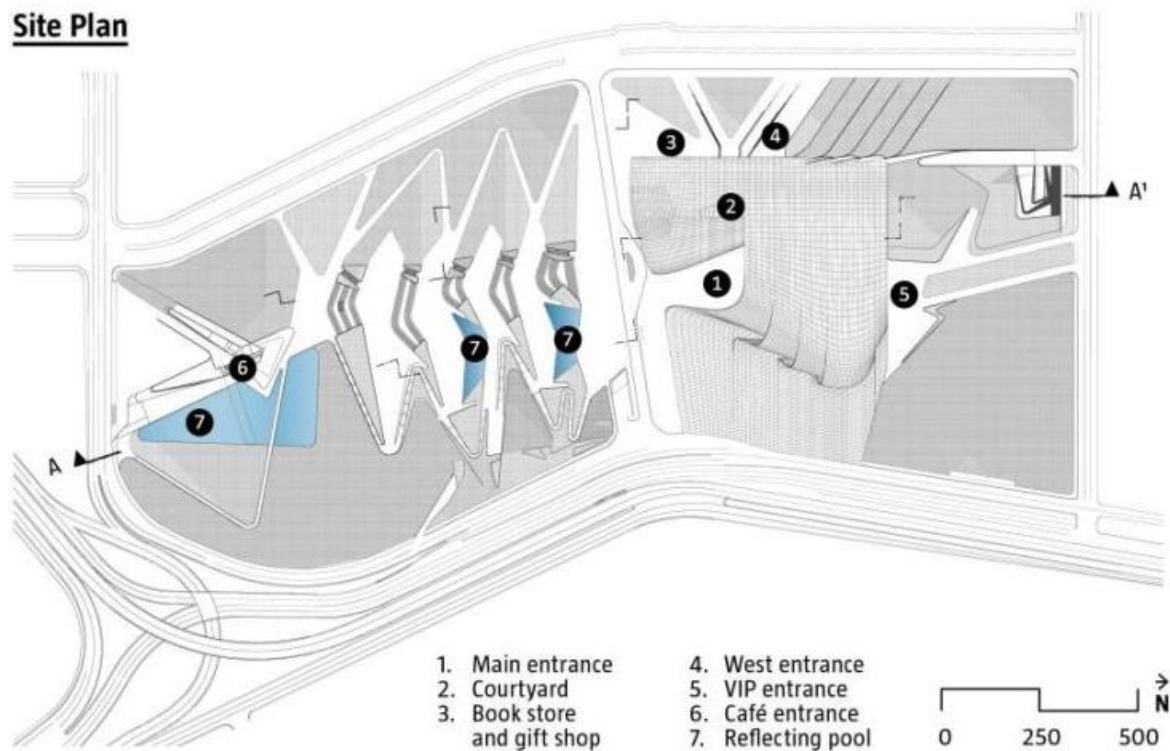
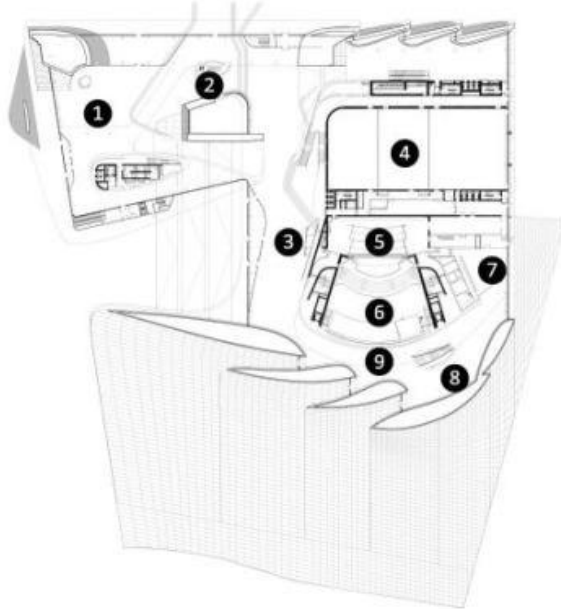


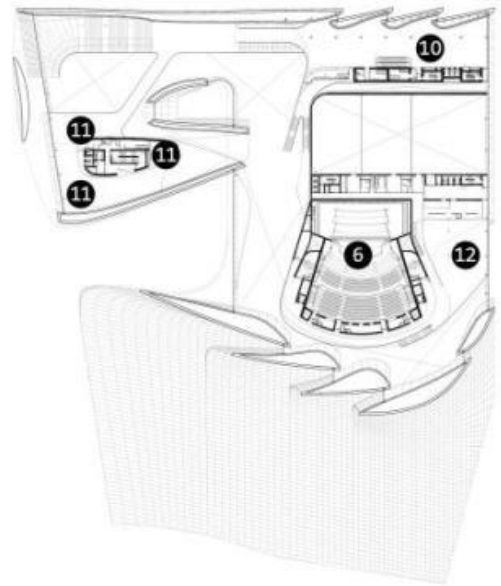
Fig 2.45 Site plan of the centre

2.5.3 FLOOR PLANS

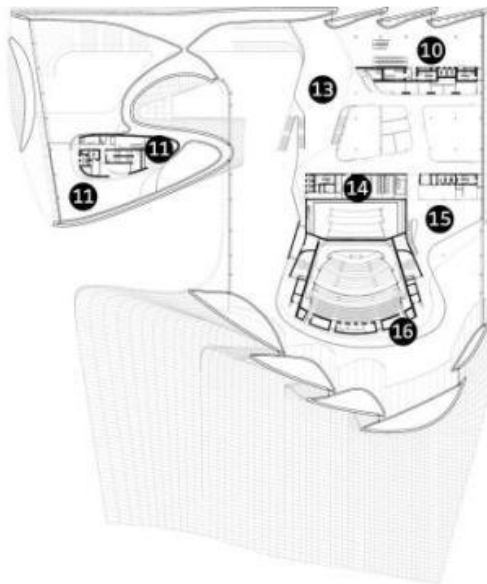
Ground-Floor Plan



First-Floor Plan



Second-Floor Plan



Third-Floor Plan

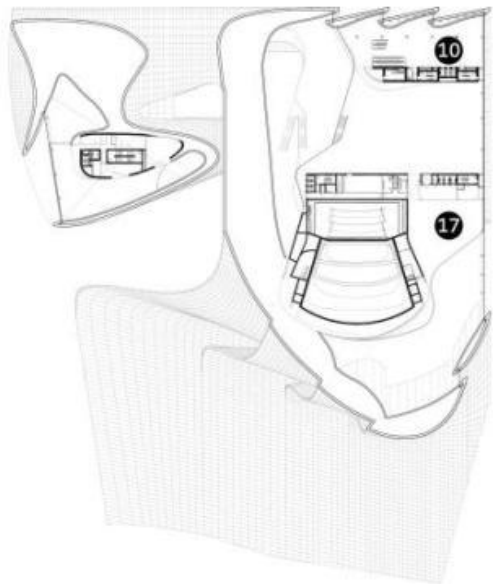
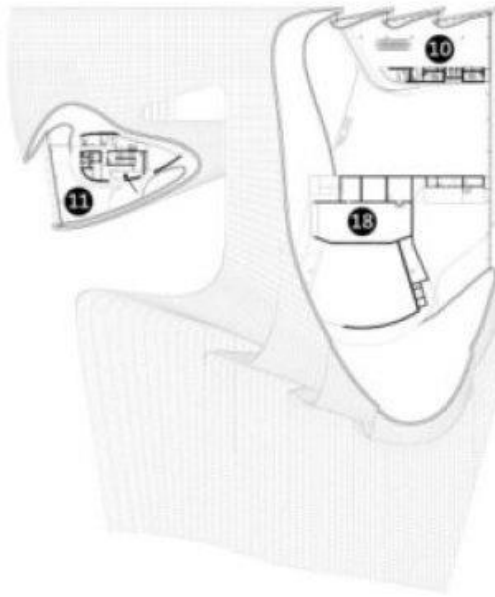


Fig 2.46 Floor plans of the centre

Fourth-Floor Plan



Fifth-Floor Plan



Sixth-Floor Plan



Seventh-Floor Plan



Fig 2.47 Floor plans of the centre

Section A-A₁

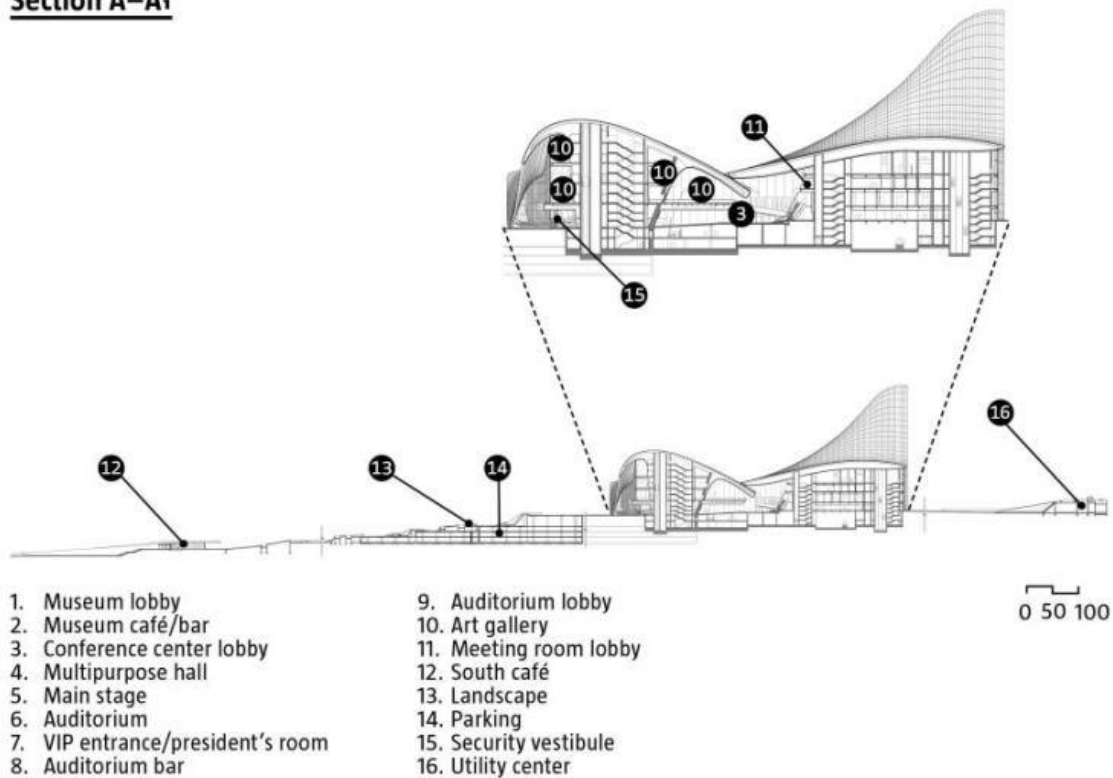


Fig 2.48 Sectional view of the centre

2.5.4 GEOMETRY

- The design progress of the structure's skin was one of the most basic yet demanding aspects of the project. Our ambition to create a surface that is so consistent that it appears homogeneous necessitated the integration of a wide range of capabilities, development rationales, and specialised frameworks into the structure's envelope. Advanced computing took into account the project members' consistent control and correspondence of these complexities.
- The Heydar Aliyev Center is essentially made up of two systems that work together: a solid structure and a space frame system. Vertical basic components are absorbed by the envelope and curtain wall system to achieve large column-free areas that allow the guest to experience the smoothness of the interior. The unique surface geometry encourages fanciful auxiliary arrangements, such as the presentation of bent 'boot

sections' to complete the backward strip of the surface from the structure's commencement in the West, and the 'dovetail' tightening of the cantilever radiates to help the structure envelope toward the site's East.

2.5.5 MATERIALITY

- The space outline framework enabled the creation of a freestyle structure and saved a significant amount of time throughout the construction process, while the foundation was designed to solidify an adjustable relationship between the space outline's unbending network and the free-shaped outside cladding creases. These wrinkles were created by a sophisticated calculating, application, and aesthetic procedure. Glass Fiber Reinforced Concrete and Glass Fiber Reinforced Polyester were chosen as excellent cladding materials because they contemplate the structure's groundbreaking versatility while responding to many useful requirements associated with a variety of scenarios: plaza, temporary zones, and envelope.

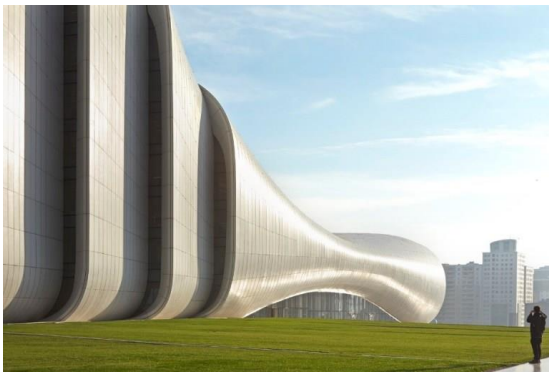


Fig 2.49 Exterior view of the centre Fig 2.50 Interior view of the centre

2.5.6 STRUCTURE

- The lighting of the Heydar Aliyev Center has been meticulously planned to emphasise the constant connection between the structure's outside and inside. The lighting design methodology distinguishes between daytime and

late-night viewing of the structure. During the day, the structure's volume reflects light, changing the look of the Center according to the time of day and survey viewpoint.

- The use of semi-intelligent glass creates enticing interior aesthetics that pique interest without revealing the liquid direction of interior spaces. This character is constantly modified in the evenings, using illumination that washes from the interior onto the exterior surfaces, unfurling the proper creation to reveal its substance and maintaining the smoothness between inside and outside.
- The Heydar Aliyev Center plan, like the rest of the project, evolved from our analyses and explorations of the site's geology and the Center's role within the larger social scene. The strategy is inserted into this unique scenario by employing these clear links, unfurling the country's future societal prospects.



Fig 2.51 Construction phase



Fig 2.52 Construction phase 2

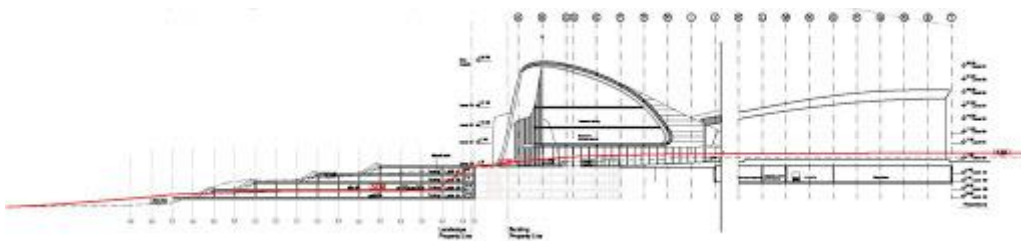


Fig 2.53 Structural section of the centre

2.5 CASE STUDY MATRIX

S.NO	TOPIC	KERALA KALAMANDAPAM	INDIA HABITAT CENTER	MUSEUM OF ISLAMIC ARTS	NATIONAL CENTER FOR PERFORMING ARTS	HYDER ALIYEV CENTER	INFERENCE
1	DESIGN INTENT	Revival and protection of traditional art forms	Facility for institutions working in the realm of improving habitation and culture. Synergistic relationship between the private and public design into a synergistic interrelationship between institutions to maximise their effectiveness.	Preservation, study and exhibition of heritage remnants from the Islamic world, hub for cultural exchange and dialogue on topics related to Islamic cultural heritage.	World-class institution and venue in India for performing arts (both local and international)	to express the sensibilities of Azeri culture and the optimism of a nation that looks to the future and to establish a fluid relationship between its surrounding plaza and the building's interior.	The main intent of the design of all the complex involves the implementation of cultural value into the design to revive and showcase the cultural entities.
2	COMPONENTS	Koottambalam (performance space), art gallery, Kaleri (studio), library, classrooms, cafeteria, offices, costume gallery - kappara, student hostel, staff quarters	Offices, convention centre, auditorium, theatres, art galleries library & resource centre, restaurants, guest rooms, fitness centre with spa and pool, library and resource centre, exhibition halls	Permanent galleries, temporary galleries, study galleries, conservation lab, collection storage, auditorium (197 seats), restaurant, gift shop museum park (26 ha.)	Corporate office, Library and Stuart-Life collection, Little theatre, box office, Jamshed Bhabha Theatre, basement parking, cafeteria, view room, Tata Theatre, membership department, central open air space, Piramal Art Gallery, Experimental Theatre, Godrej	Museum, Conference hall, Multi purpose hall, Auditorium, Art gallery, South café Park, Utility center, Restaurant, President suite.	the spaces tend to change according to the user typology where most of the complex has the recreational and performing arts spaces where the offices spaces depends on the typology of the site
3	SITE CONDITIONS	Rural riverside, surrounded by sparse fine grain residential settlements with lots of vegetation	Urban cultural hub, tight site with coarse, eye grain. Flanked by roads on all sides. Context: Residential colonies to south, Golf Links to north, institutional buildings to the east	Urban city centre, site cut-off from city by being located on a man-made island. In close proximity to major public hub (the Marina) and city centre. Surrounded by water on three sides.	Urban city centre, site located at northernmost point of Marine Drive. In close proximity to major public hub (Marine Drive and city centre. Surrounded by water on two sides.	The project is located in the center of the city. The project is intended to play an integral role in the intellectual life of the city. Located close to the city center, the site plays a pivotal role in the redevelopment of Baku.	In most of the cases, the cultural centres are located in the city centre in order to provide a greater reach and accessibility to the people who live in the city
4	CONNECTIVITY	Direct access from Thiruvananthapuram-Shornur highway	Road Direct access from Lodi Road, Vardimen Marg and Meeru Marg with Bagh station (Yellow line), JLN Stadium (violet line)	Road Direct access from Al Corniche Street Metro: Souq Waqif station (gold line) Bus: Fishing Port, Souq Waqif stations	Road Direct access from Durrat Taj Road Rail: Churchgate Station (Local railways)	Road Direct access from Heydar Aliyev Avenue	Direct access has been provided from the main road for most of the centres
5	NATURE OF OPEN SPACE	Verdant green, natural landscape (trees)	Stepped spaces, trees with seating spaces, water bodies	Courtyard on second floor with water bodies; lookout zones into the sea	Landscaped lawns and paved hardscapes	landscaped lawns and stepped spaces with landscaping features	Landscape has been a vital part in the cultural complex which eases circulation around the complex and also creates a pleasant feeling.
6	ARCHITECTURAL INFLUENCES	Traditional Kerala architecture - sloping roofs with terracotta tiles, low-rise structures (ground + 2 floors)	Post-independence modern architecture. Exposed brick facades with ribbon windows (glass) and exposed concrete near auditorium spaces	Limestone clad cubist forms with minimal openings. Sharp angles and modernist architecture influences from Islamic architecture	Modernist architecture with Malad stone cladding, cubical forms	Neo futurism architecture which flows with curved style that eschews sharp angles	Most of the architectural styles were vernacular where they followed the traditional style where some were manifested in a modernist way
7	DESIGN INNOVATIONS/FUNCTIONAL	Viewing gallery for Kaleri, presence of Koottambalam outside a temple precinct - increasing public engagement with heritage and art	Creating sustainable and passively designed large-scale complexes, blending into the Indian context. Creating an active public realm within an office space.	Creating a serene public zone within a building in a busy precinct, drawing a contemporary form from strong local influences.	Large open spaces for cultural development in a very tight urban fabric (Mumbai). facilities for large scale performances that cater to the various teams behind a production	The design sought to establish a continuous, fluid relationship between the surrounding plaza and the building's interior. The plaza, acting as the ground surface, accessible to all as part of Baku's urban fabric, rises to envelop an equally public interior space and define a sequence of event spaces dedicated to the collective celebration of contemporary and traditional Azeri culture.	Most part of the design of cultural complex majority depend on creating a public realm to increase the public interaction who are basically exposed to the cultural entities.
8	DESIGN INNOVATIONS/STRUCTURAL	Traditional wooden trusses to span performance spaces	_____	Load-bearing walls as a structure, the whole mass (walls, floors and ceilings) read as one	High acoustic performance auditoria with tessellating roof panels, allowing for even distribution of sound. Steel structures in auditoria roofs creating large span structures	The structure principally consists of two collaborating systems: a concrete structure combined with a space frame system. In order to achieve large-scale column-free spaces that allow the visitor to experience the fluidity of the interior, vertical structural elements are absorbed by the envelope and curtain wall system.	Modern technologies were used for the new age cultural centres but most of the center were built on traditional style which reflects their culture
9	POROSITY AT PEDESTRIAN	Single entry complex, sparsely distributed built blocks - no strong/confined open space	Three entries, strong open-space structure bound by built mass. Highly porous from the interior	Single entry complex. Internal movement between spaces to a limited extent	Three entries, vague open-space structure bound by built mass. Built masses not very porous	Two entries for the public and on entry for the VIPs	Most of the complex had multiple entries to ease the circulation and also reduces the traffic congestion.
9	SUSTAINABILITY FEATURES	Vernacular roofs, local materials. Zoning maximises on sunlight and wind to create naturally lit and ventilated spaces. Does not disturb natural contours and vegetation, or flow of nearby river.	Courtyards with breaks in built mass allowing wind to flow through site. Masses creating shaded public realm. Verdant landscape creates cool microclimate. Building mass within allow for daylight penetration. Ribbon windows decrease heat intake, while providing adequate views and daylight. Solar cells on the roof to offset power demand. In-house STP to treat sewage and effluents before reuse.	Flooded with natural light during the day due to the tall bay window on the north, reducing lighting demands. Atrium with openings at the top allows for stack effect and release of hot air. Light coloured facade decreases heat intake. thick building envelope increases thermal mass	Large windows in foyer areas allowing for naturally lit spaces during the day. Local materials generously employed throughout building and in the structure.	Its shell is made out of a steel space frame and glass-fibre-reinforced concrete panels, concealing the vertical support within the walls. Façade of the complex consist of 18,000 panels, approximately 1 m by 2 m. Fibre Reinforced Polymer (FRP) and Glass Fibre Reinforced Concrete (GFRC).	The main aspect of the cultural complexes is the implementation of sustainable features which improves the productivity and reduces the waste which paves way for a better quality of life

Fig 2.54 Comparative case study

3. STANDARDS

3.1 MUSEUM AND GALLERY SPACE

3.1.1 GALLERY SPACES

- Most exhibitions follow a narrative when displaying exhibits, which requires people to move along a fixed movement path. A gallery space should be designed to cater to this need.
- Gallery spaces may be designed as large spaces that can be partitioned up as per requirements to create smaller display spaces, or as rooms in varying sizes, to cater to different scales of exhibitions, The normal human angle of vision starts at 27 deg above eye level.
- For the standing viewer, this means that well-lit pictures should not be hung 10m away with the top, not more than 49 m above eye level and the bottom about 70 cm below.
- Smaller pictures should ideally be hanged in such a fashion that the point of emphasis stays at eye level.
- A typical gallery space is between 200 to 300 sqm area depending upon the scale of the exhibition happening inside.
- The dimension of 200 sqm area allows for easy partitioning into smaller spaces. Adjacent galleries can also be combined into larger gallery spaces.

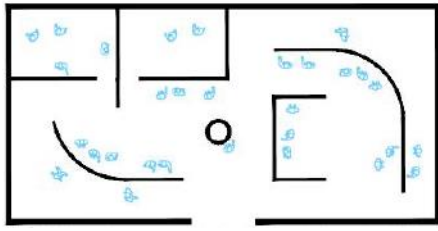


Fig 3.1 Typical museum layout plans

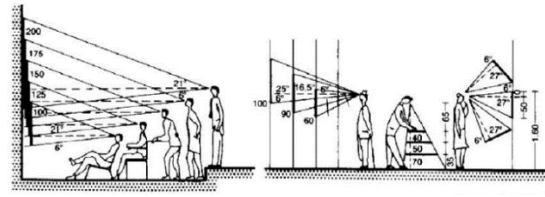


Fig 3.2 Optimal viewing points

3.1.2 LIGHTING

Daylighting :

- Daylighting can greatly improve the quality of space inside a gallery and provide views and sightlines to the outside. However, they need to be incorporated carefully as too much heat may destroy valuable and fragile artefacts.
- Openings, if not sealed properly, may also induce humidity within these spaces, which can have a detrimental impact on the exhibits inside. Diffused and indirect light, hence, is the best option when incorporating daylight into a gallery space.
- External facade elements may help in reducing glare and diffusing the sunlight while choosing the right kind of glazing that can control heat exposure.
- Some buildings have in-built digital filters that adjust the opacity of glass according to internal requirements.
-

Window lighting :

- Allows direct light in and can be controlled with shading devices
- Visually connect to the exterior.

Clerestory lighting:

- Allows deeper penetration of light and minimalized glare
- Combining aperture in a different direction can include openness
-

Top lighting :

- Helps to achieve ambience and uniform lighting

- Offers flexibility without interfering with the organizational plan.
- Openings must be equally distributed for uniform lighting
- Can be used to create dynamic spaces

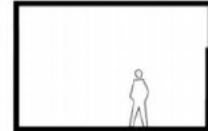
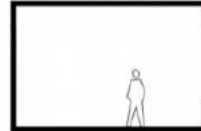
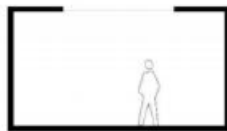


Fig 3.3 Basic types of openings

Fig 3.4 Window & clerestory openings

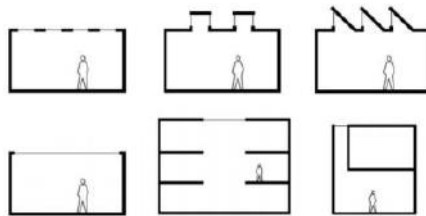


Fig 3.5 Different types of top lighting

3.2 LEARNING CENTRE

3.2.1 LIBRARY

A library consists of several sub-parts, each with its own set of requirements:

1.Reference zone

2.Book stacks:

- The books are usually held within open shelves in reading rooms, accessible book stacks and restricted-access closed stacks.
- The number of bookshelves depends on the type of organisation, accessibility of users, type of shelving, system of subject ordering and structural grid.

3. Reading areas

4. Workspaces:

Preferably in daylight areas

- Simple reading/work place = 2.5 sq.m.
- individual work place = 4 sq.m.

5. Archive store:

- Best situated in the basement - Must have controlled climate conditions and accessibility Other facilities in public libraries may include:

1. Enquiry desks
2. Cafeterias
3. Spaces for listening to music
4. Recreation and meeting rooms
5. Music/art lending library

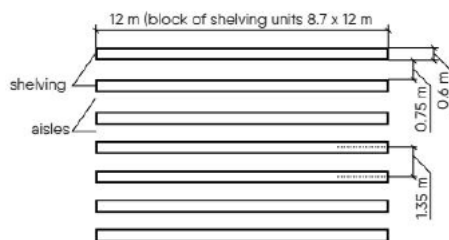


Fig 3.6 Shelf system for closed racks

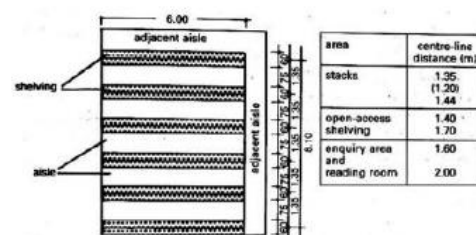


Fig 3.7 Shelf system for closed stacks

structural grid	7.20 m × 7.20 m	7.50 m × 7.50 m	7.80 m × 7.80 m	8.40 m × 8.40 m
n × centre-line distance	6 × 1.20 5 × 1.44 4 × 1.80	6 × 1.25 5 × 1.50 4 × 1.87	6 × 1.30 5 × 1.56 4 × 1.95	6 × 1.20 5 × 1.40 4 × 1.68

Fig 3.8 Distance between the shelf

area	volumes per shelf
stacks	25-30
open-access shelving	20-25
enquiry area and reading room	20

Fig 3.9 Volume per shelf

3.2.1 CLASSROOMS AND SEMINAR HALLS

- As per pupil in traditional classrooms, 2sqm for teaching in sets, 3sqm for open plan teaching, 4.5 sqm including ancillary areas and standard room shape is rectangular or square (12*20m, 12*12)

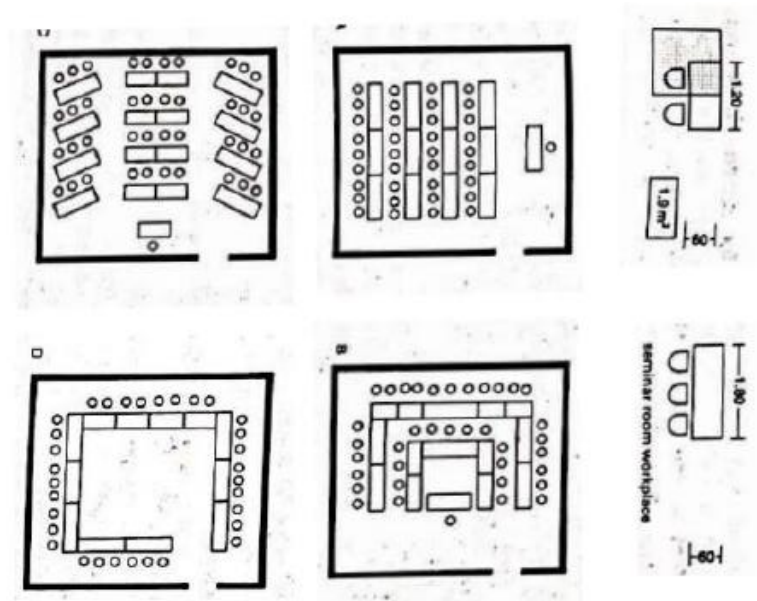


Fig 3.10 Seminar hall arrangements

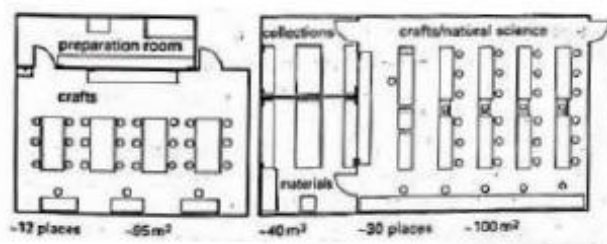


Fig 3.11 Crafts teaching classroom

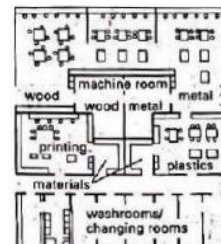


Fig 3.12 Handicrafts classroom

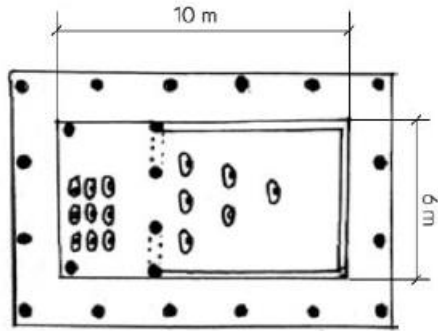


Fig 3.13 Traditional dance classroom

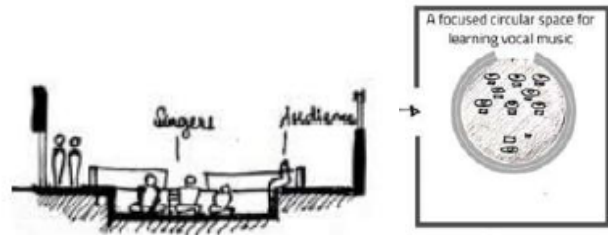


Fig 3.14 Traditional music classroom

3.3 PERFORMING ARTS

3.3.1 AUDITORIUM

It consists of several functions which can be grouped into three main categories :

- Front of the house
- Stage and seating space
- Back of the house

i) Front of the house

The front of the house is dedicated to the audience and houses all facilities required by the audience before, during and after the show. It consists of.

- The pre-function lobby
- Box office
- Cloakrooms
- Waiting lounge
- Toilets
- F&B Bar.

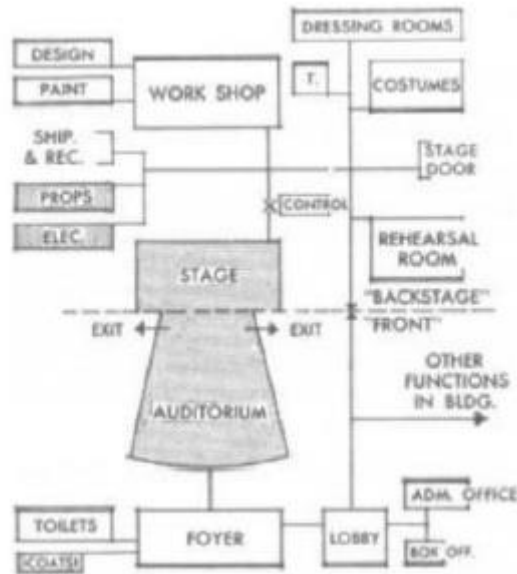


Fig 3.15 Functional layout of the auditorium

ii) Seating areas

Sizing:

- An area of at least 0.5 sq.m. per spectator is to be used for sitting spectators.

Length of rows:

- A maximum of 16 seats per aisle, 25 seats per aisle is permissible if one side exit door of 1 m width is provided for every 3-4 rows.
- The National Building Code recommends having not more than 14 seats in a two-aisle row and not more than 7 seats for a single-aisle row.
- The spacing of rows of seats from back to back shall be neither less than 850 mm nor less than 700 mm plus the sum of the thickness of the back and inclination of the back. There shall be a space of not less than 350 mm between the back of one seat and the front of the seat.

Exits, escape routes:

- 1 m wide per 150 people (as per Neuferts standards). NBC recommends exit widths of 2000 mm
- Clear aisles of min. 1.2 m shall be provided such that no seat is more than seven seats away from the aisle.

- Cross-aisles shall be provided parallel to the line of seating to provide direct access to the exit (min. of one cross-aisle for every 10 rows of seating).
- The width of the cross aisles shall be minimum of 1 m. For an auditorium of this capacity, at least 3 exits have to be provided.

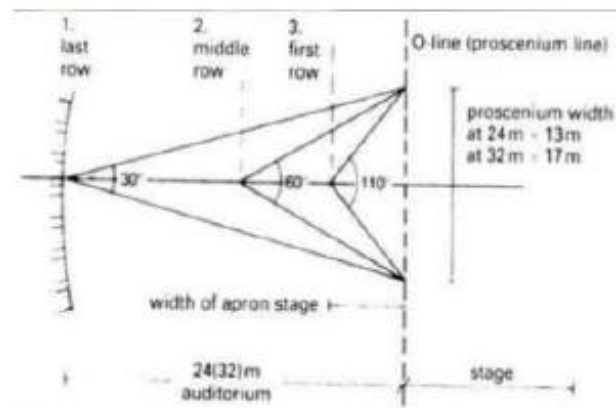


Fig 3.16 Optimal width of the auditorium

iii) Proportions of the auditorium (classical):

Maximum distance of the last row from the proscenium line (start of the stage): -

- playhouse - 24 m (maximum distance from which it is still possible to recognise facial expressions)
- opera - 32 m (important movements still recognisable)

Stage :

- There are three-stage forms: full stage, small stage and set areas.
- Full stage: More than 100 sq.m. of the stage area, stage ceiling more than 1 m above the top of the proscenium arch. Has an iron safety curtain that cuts off the stage from the rest of the auditorium in case of emergencies.
- Small stage: Area lesser than 100 sq.m. without stage extensions or safety curtains.
- Set areas: Raised acting areas in rooms without ceiling projection

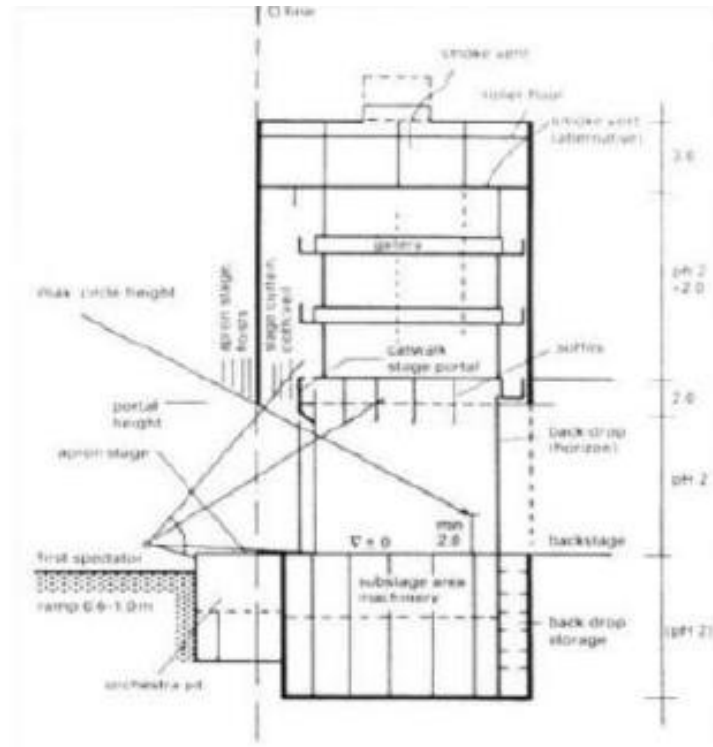


Fig 3.17 Cross-sectional proportion of stage

iv) Back of the house:

The back of the house consists of spaces and facilities for performers, directors and everyone involved in the production of the performance, as well as their instruments and properties. It consists of

- Make-up and rehearsal spaces
- Production management spaces
- Monitoring spaces
- Open stages require secondary areas for the sets and storage areas for platforms and stands (roughly equal to the playing area).
- Storage rooms may be used for the stage items and scenery and can be subdivided into sets, backdrops, furniture, props store, store for costumes, etc. Scenery store at stage height, in the immediate vicinity to stage.
- **Workshops:** generally recommended to be kept separate from the stage due to space limitations and risk of fire accidents.

- The space required for scenery workshops is usually 4-5 times the area of the main stage. They must be installed on a single level.
- The painting room area must be sufficient to allow two large back-drops or round horizons to be spread flat on the floor for painting. It should have an attached sewing room to sew together sections of the canvas.
- **The carpenters' shop** is subdivided into the bench and machine rooms, with a connected wood store.
- **Upholstery room:** 1/10th the size of the painting room
- All workshops may be grouped around an assembly room for setting up of scenery, as the same size as the stage
- Changing, washing and restrooms for technical personnel required. Offices for technical management personnel and additional workshops for sound, lighting, props and costumes required.
- **Personnel rooms:** built on one side, opposite the technical side. Houses the changing rooms, costume workshops, administration and directors' rooms.
 - Rehearsal rooms:** At least one required, as per dimensions of the main stage.
- **Foyer:** Multiple foyers are designed based on the capacity and requirements, areas of 0.8 - 2 sq.m. per spectator are taken.
- **Cloakrooms:** Min. 4 m per 100 visitors. Toilets: @1 WC/100 people - 1/3 for men.

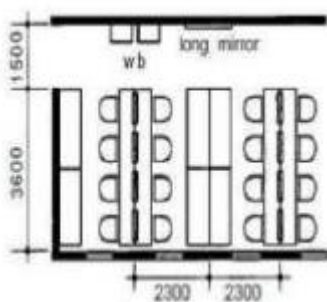


Fig 3.18 Communal dressing rooms

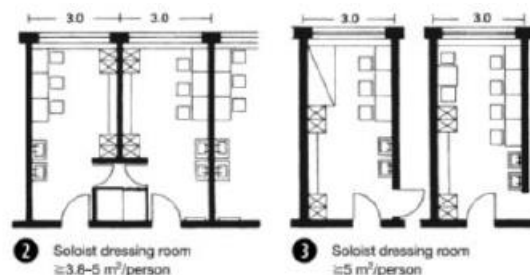


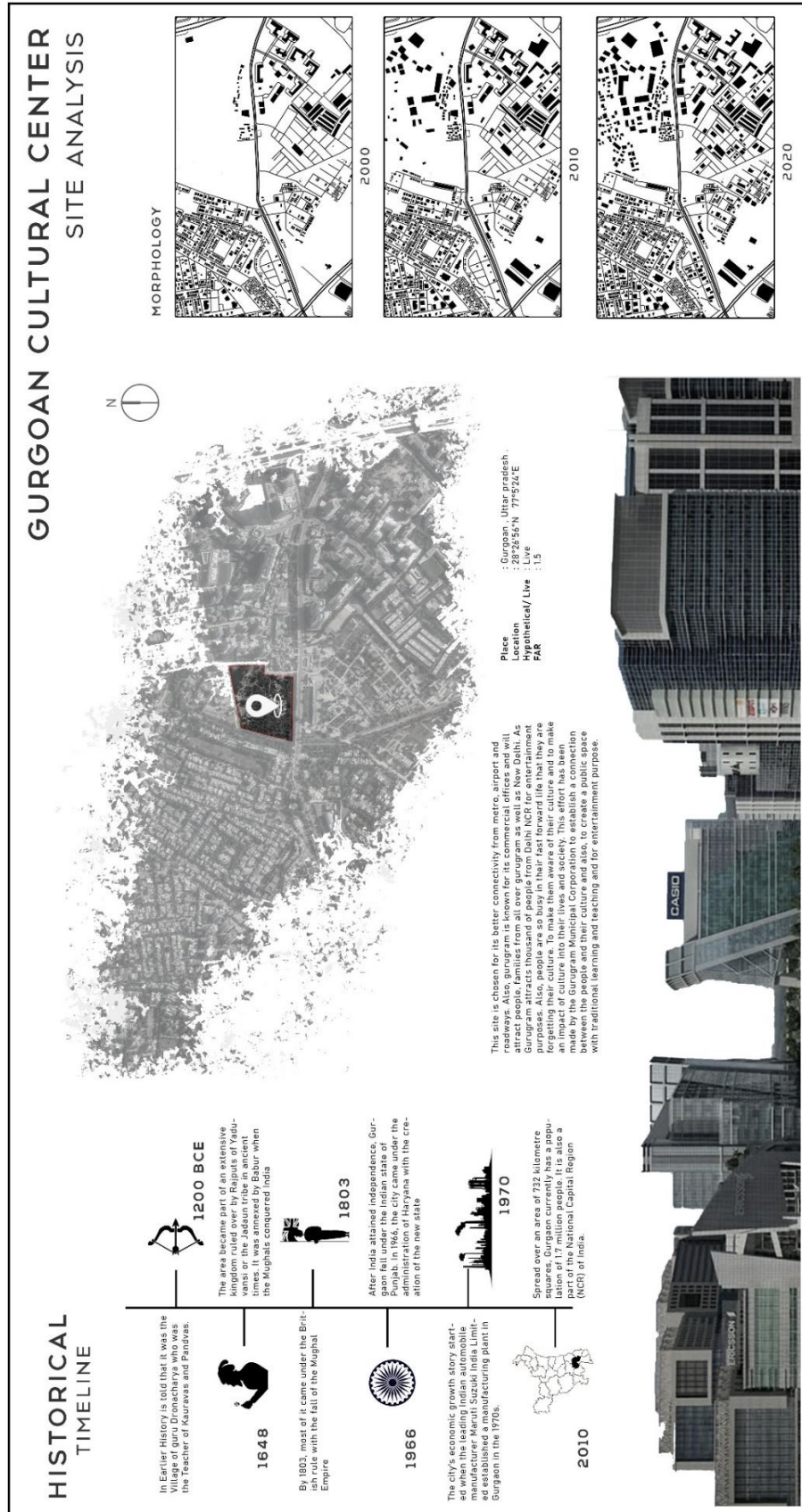
Fig 3.19 Soloists dressing room

3.3.2 OPEN AIR THEATRE

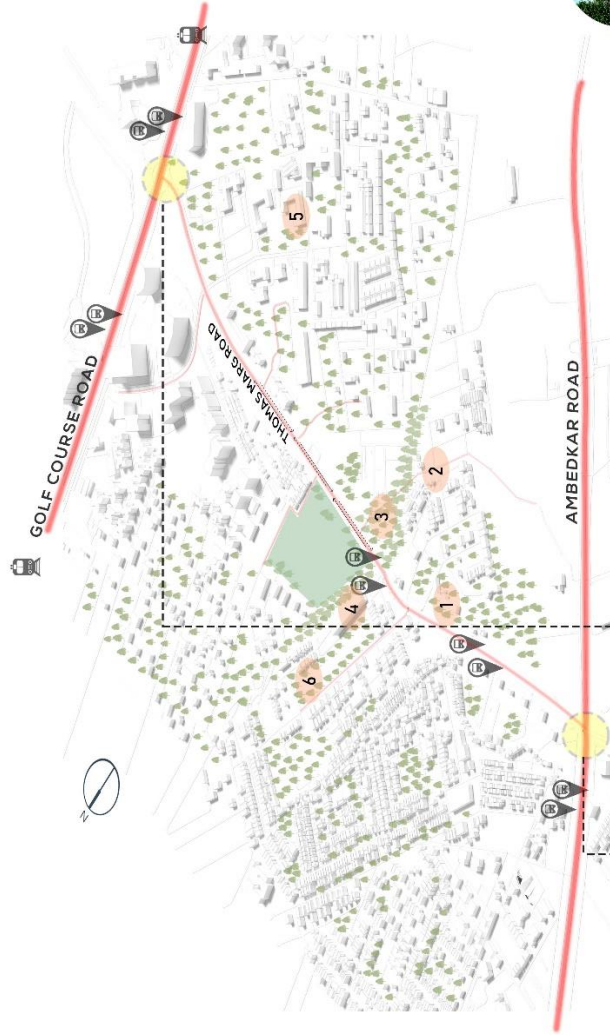
- Prevailing noise conditions should not exceed 45 dB on the 'A' scale.

- The amphitheatre should be so located that the wind direction is towards the audience from the stage.
- Seating should not face the sun as this may cause discomfort to spectators.
- The backstage wall should be made reflective and broken into convex shaped surfaces.
- Overall shape should be flat in the plan; however, if it is desired to be concave, it should be broken into convex surfaces which should be between 90 to 180 cm in width.
- Depth of stage should be arranged to suit individual requirements; where it exceeds 6 m, it is necessary to treat backstage wall acoustically.
- A ceiling reflector should be provided for directing the sound to the rear seats. This reflector may be hard reflecting surface slanting at a suitable angle towards the audience and fixed over the main sound-originating area of the stage. Even if reflectors are provided as recommended sound amplification should be resorted to in case the number of audiences exceeds 600 or background noise is more than 45 to 50 dB. An average level of 80 dB must be maintained over the entire listening area.

4. SITE ANALYSIS



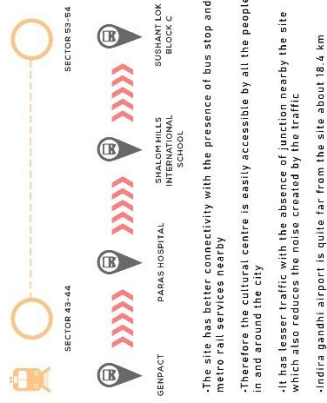
GURGOAN CULTURAL CENTER SITE ANALYSIS



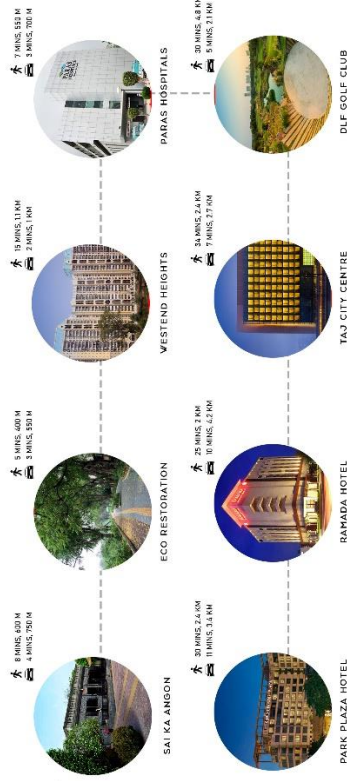
NODE ANALYSIS

- 1 SHALOM INTERNATIONAL SCHOOL
- 2 SAI KA ANGON
- 3 ECO RESTORATION VAZIRABAD BUNDH
- 4 PARAS HOSPITAL
- 5 LANCERS INTERNATIONAL SCHOOL
- 6 LOTUS PARK

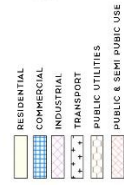
CONNECTIVITY



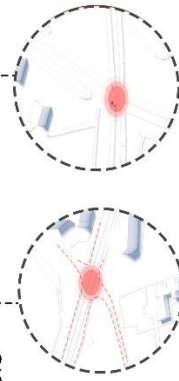
LANDMARKS ANALYSIS



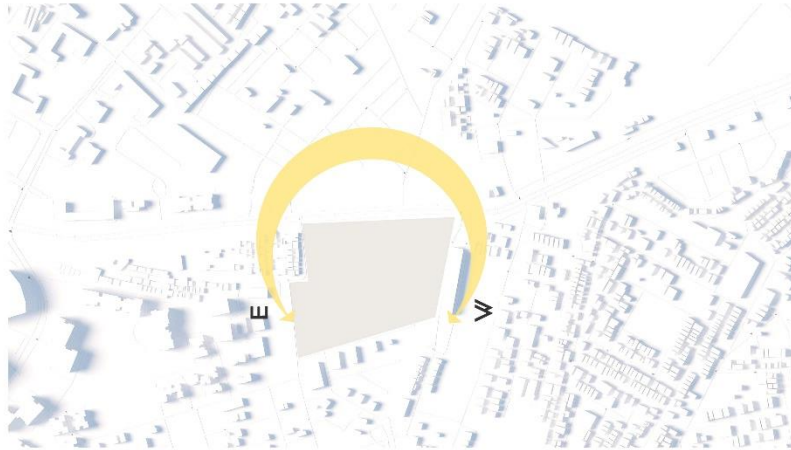
LAND USE MAP



TRAFFIC ANALYSIS



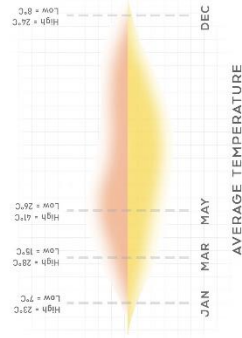
GURGOAN CULTURAL CENTER SITE ANALYSIS



SUN PATH ANALYSIS



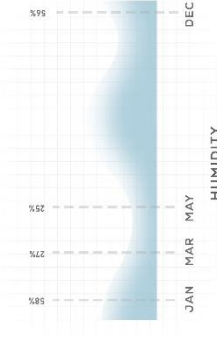
WIND PATH ANALYSIS



AVERAGE TEMPERATURE



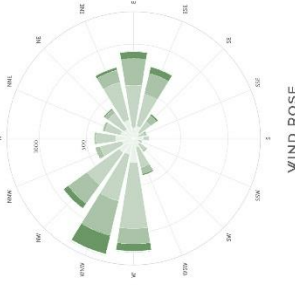
PRECIPITATION



HUMIDITY



CONTOUR PROFILE

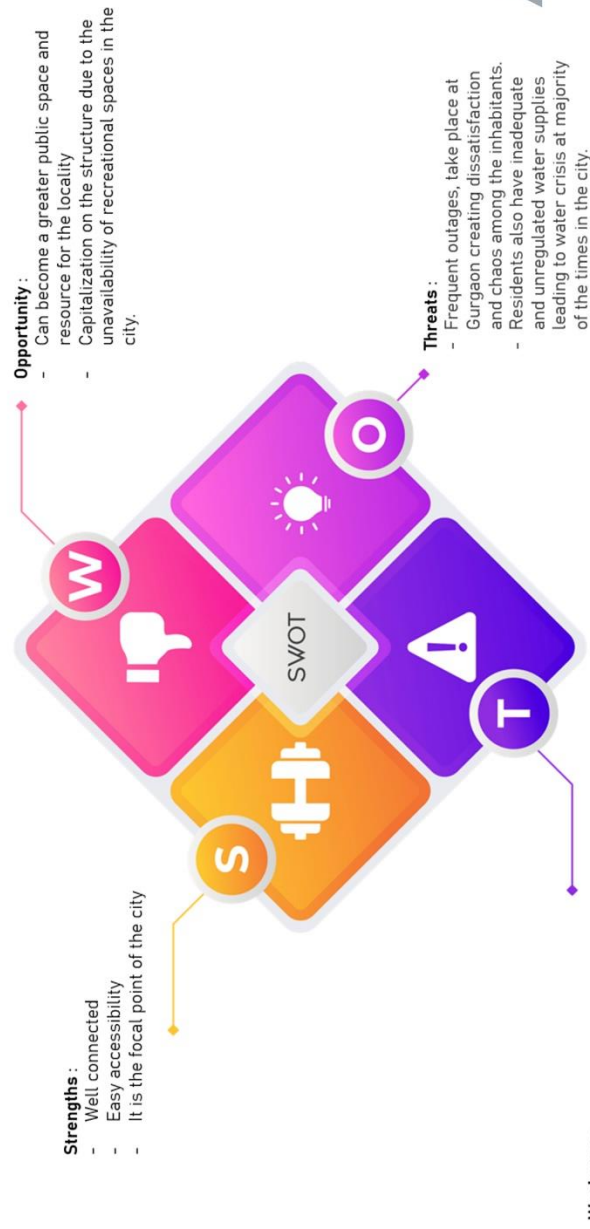


WIND ROSE

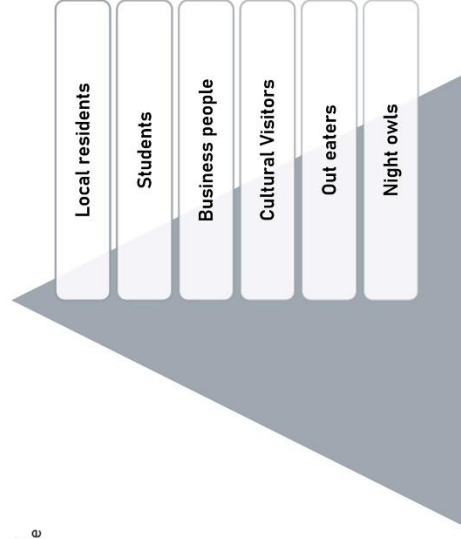
- The wind strongly prevails from North west direction and also mildly from the East direction
- The site falls under steppe climate and there is little rainfall through the year.
- Its is mostly hot and dry throughout the year so the heat factor has to be strongly considered in the design elements.

GURGOAN CULTURAL CENTER SITE ANALYSIS

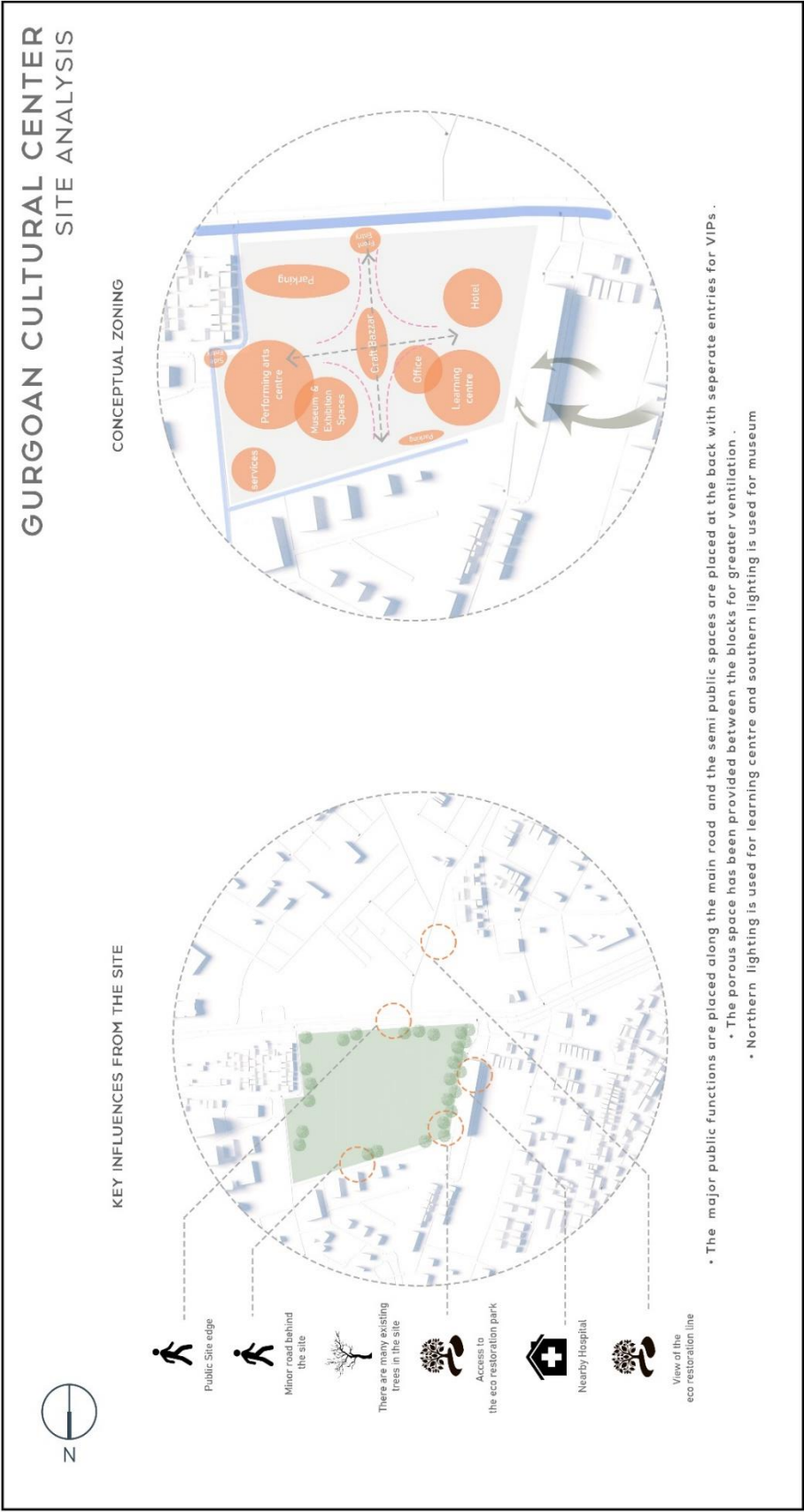
SWOT ANALYSIS



USER GROUP



5. ZONING



6. CONCEPT

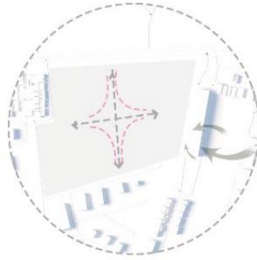
GURGOAN CULTURAL CENTER
SITE ANALYSIS

CONCEPT : PROJECT VISION

1. Clubbing complementary functions together



2. Interconnectedness

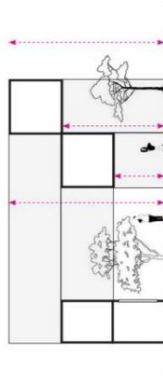
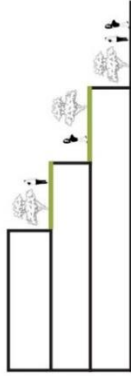


3. Active public realm



CONCEPT: BUILDING

2. Stepping masses



Forming terrace gardens and roof spaces of these extended portions can also be converted into usable spaces also.

Punctures in the massing will allow cross ventilations and connectivity to the outer park in the learning centre

DESIGN CONCEPTS

- 1. Activated public realm on ground floor:**
Making public functions on the ground levels and allowing free flowing pedestrian across the cultural centre
- 2. Centre spine acts as contextual connector:**
The centre axis acts as connector between the spaces in cultural centre.
- 3. Multiple spillout spaces in the upper floors:**
Numerous terraces act as spillout spaces for adjoining functions .
- 4. Creation of public and semi-public zones:**
Through effective massing a public pedestrian realm is created which connects semi public courts connected to individual building uses.

SUSTAINABLE DESIGN CONCEPTS

Passive Sustainable Design : Passive strategies, such as considering sun orientation and climate when siting and being thoughtful about window placement and operation, in certain climates, thermal mass techniques can be used to harness solar energy.

2. **Active Sustainable Design:** Architects consult with mechanical and electrical engineers to implement high-efficiency electrical, plumbing, HVAC, and other systems, which are designed to have small environmental footprints.
3. **Renewable Energy Systems:** Renewable energy systems, including those that harness solar and wind energy, are also great options for some buildings. These systems are often used in conjunction with passive design strategies.
4. **Storm water management**
5. **Green Building Materials and Finishes.**

7. AREA STATEMENT

S.NO	SPACE	AREA	QUANTITY	TOTAL	SUB TOTAL	OVERALL
1	MUSEUM AND GALLERIES					
1.1	ENTRY AND WAITING AREA					
	TICKETING OFFICE	15	2	30		
	FOYER	75	1	75		
	RECEPTION	20	1	20		
	SECURITY CHECK AND CLOAK ROOM	30	1	30		
	LOBBY AND LOUNGE	200	1	200		
	EMERGENCY MEDICAL AID	20	1	20		
	TOILETS	40	2	80		
	GIFT SHOP	20	1	20	475	
1.2	ADMINISTRATIVE AND MANAGEMENT					
	DIRECTOR OFFICE	50	1	50		
	LOGISTICS AND OPERATIONS	12	10	120		
	CONFERENCE ROOM	75	1	75		
	PANTRY	20	1	20		
	TOILET	40	2	80		
	STORAGE AND ARCHIVES	20	2	40	385	
1.3	HERITAGE GALLERY					
	MYTHOLOGICAL HERITAGE	1000	1	1000		
	RELIGIOUS HERITAGE OF GURUGRAM	400	1	400		
	HISTORICAL PLACES OF GURUGRAM	200	2	400		
	MULTICULTURAL HERITAGE OF INDIA	1000	1	1000		
	TEMPORARY GALLERIES	200	10	2000	4800	5660
2	LEARNING CENTRE					
2.1	ENTRY AND LOUNGE					
	FOYER	50	1	50		
	RECEPTION	15	1	15		
	LOBBY AND LOUNGE	100	1	100		
	MANAGER OFFICE	35	2	70		
	ADMIN OFFICE	12	10	120		
	ACCOUNTS	50	1	50		
	CONFERENCE ROOMS	40	1	40		
	TOILETS	40	2	80	525	
2.2	LIBRARY					
	LIBRARY LOBBY	100	1	100		
	INFORMATION DESK	10	1	10		
	LITERATURE HERITAGE GALLERY	200	1	200		
	READING ZONE	500	1	500		
	BOOK STACK ZONE	200	1	200		
	GROUP SEATING	12	6	72		
	REFERENCE ZONE	50	1	50		
	ACQUISITIONS	40	1	40		
	ARCHIVES	25	1	25		
	PERIODICALS	12				
	CATALOGING	10	1	10		
	AV LIBRARY	200	1	200		
	HEAD LIBRARIANS OFFICE	24	1	24		
	ASSISTANT LIBRARIAN OFFICE	18	1	18		
	STAFF LOCKERS	20	1	20		
	PANTRY	20	1	20		
	TOILETS	40	2	80	1569	
2.3	EVENT VENUES					
	SEMINAR ROOMS	200	2	400		
	CONFERENCE HALLS	150	2	300		
	MULTIPURPOSE HALLS	150	2	300		
	PREFUNCTION AREA				1000	
2.4	SKILL CENTRE					
	ENTRY AND COMMON FACILITIES					
	FOYER	50	1	50		
	RECEPTION	15	1	15		
	STAFF OFFICES	12	1	12		
	TOILETS	40	2	80	157	

2.5	EMBROIDERY AND WEAVING					
	CLASS AND PRACTICE ROOM	75	2	150		
	STORE ROOM FOR RAW MATERIALS	50	1	50		
	STORE ROOM FOR FINISHED PRODUCTS	25	1	25		
	STUDIO DIRECTOR ROOM	12	1	12		
	EXHIBITION AREA	100	1	100	337	
2.6	POTTERY					
	CLASS AND PRACTICE ROOM	75	2	150		
	STORE ROOM FOR RAW MATERIALS	50	1	50		
	STORE ROOM FOR FINISHED PRODUCTS	25	1	25		
	STUDIO DIRECTOR ROOM	12	1	12		
	EXHIBITION AREA	100	1	100	337	
2.7	WOVEN FURNITURE					
	CLASS AND PRACTICE ROOM	75	2	150		
	STORE ROOM FOR RAW MATERIALS	50	1	50		
	STORE ROOM FOR FINISHED PRODUCTS	25	1	25		
	STUDIO DIRECTOR ROOM	12	1	12		
	EXHIBITION AREA	100	1	100	337	
2.8	SCULPTURE AND CARVING					
	CLASS AND PRACTICE ROOM	75	2	150		
	STORE ROOM FOR RAW MATERIALS	50	1	50		
	STORE ROOM FOR FINISHED PRODUCTS	25	1	25		
	STUDIO DIRECTOR ROOM	12	1	12		
	EXHIBITION AREA	100	1	100	337	
3.3	FINE ARTS					
	CLASSICAL DANCE STUDIO	100	1	100		
	FREESTYLE DANCE STUDIO	100	1	100		
	WESTERN DANCE STUDIO	100	1	100		
	CLASSICAL MUSIC	100	1	100		
	INSTRUMENTAL MUSIC	100	1	100		
	ACTING STUDIO	100	1	100		
	STORAGE OF INSTRUMENTS	50	1	50	650	
	STORAGE FOR RAW MATERIALS	50				
2.9	SUPPORT START FACILITIES					
	OFFICE SPACE	12	5	60		
	LOCKER SPACE	12	1	12		
	PANTRY	12	1	12		
	TOILET	40	1	40	124	5373
3	PERFORMING ARTS CENTER					
3.1	ENTRY AND LOUGE					
	FOYER	75	1	75		
	RECEPTION	15	1	15		
	SECURITY CHECK	6	2	12		
	LOBBY	200	1	200		
	TOILETS	40	2	80	382	
3.2	ADMIN					
	MANAGER	12	1	12		
	STAFF ROOM	40	1	40	52	
3.4	AUDITORIUM					
I)	ENTRANCE					
	FOYER	228	1	228		
	BOX OFFICE	10	1	10		
	TOILETS	60	2	120		
	VIP LOUNGE	60	1	60		
	FOOD AND BEVERAGE BAR	500	1	500	918	
II)	MAKEUP AND REHEARSAL					
	BACKSTAGE LOUNGE	40	1	40		
	REHEARSAL ROOM (LARGE)	40	1	40		
	REHEARSAL ROOM(SMALL)	10	2	20		
	DISCUSSION ROOM	15	1	15		
	DRESSING ROOM (GROUP)	60	2	120		
	DRESSING ROOM (SINGLE)	11	4	44	279	

III)	PRODUCTION					
	STAGE MANAGER	15	1	15		
	STAGE WORKSHOP	120	1	120		
	SCENE STORE (BACKSTAGE)	70	1	70		
	SCENE STORE	100	1	100		
	COSTUME STORE	45	2	90		
	COSTUME WORKSHOP	45	1	45		
	LAUNDRY	35	1	35		
	LOADING /UNLOADING DOCK	46	1	46		
	PANTRY	12	1	12	533	
IV)	MONITERING					
	SECURITY CONTROL ROOM	9	1	9		
	PROJECTION ROOM	10	1	10		
	LIGHT AND SOUND CONTROL ROOM	30	1	30		
	SPOTLIGHT BOOTHS	35	1	35		
	RECORDING ROOM	15	1	15	99	
V)	PERFORMANCE					
	STAGE	180	1	180		
	SEATING	840	1	840	1020	
3.5	BLACK BOX/EXPERIMENTAL THEATRE					
I)	ENTRANCE					
	LOBBY	72	1	72		
	BOX OFFICE	10	1	10		
	CLOAK ROOMS	10	2	20		
	WAITING LOUNGE	36	1	36		
	TOILETS	40	2	80		
	FOOD AND BEVERAGE BAR	100	1	100	318	
II)	MAKEUP-UP AND REHEARSAL					
	DRESSING ROOMS	30	2	60		
	TOILETS	30	2	60	120	
III)	MONITERING					
	MECHANICAL/ELECTRICAL ROOM	40	1	40		
	CONTROL ROOM	40	1	40		
	TOILETS	26	2	52		
	STORAGE	20	1	20	152	
IV)	PERFORMANCE					
	STAGE	70	1	70		
	AUDITORIUM	360	1	360	430	
3.6	OPEN AIR THEATRE					
	STAGE	25	1	25		
	PODIUM	2	1	2		
	GREEN ROOMS	12	2	24		
	CHANGING ROOMS	3	4	12		
	SEATING	240	1	240	303	4606
4	OFFICE					
4.1	HERITAGE INSTITUTIONS					
	HARYANA TOURISM OFFICE	300	1	300		
	INTACH (HARYANA)	300	1	300		
	ARCHEOLOGICAL SURVEY OF INDIA	300	1	300		
	CENTRE FOR HERITAGE STUDIES	300	1	300	1200	
4.2	COPORATE OFFICES(RENTABLE)					
	OFFICE(SMALL)	300	4	1200		
	OFFICE(MEDIUM)	600	4	2400		
					3600	4800
5	HOTEL/ACCOMADATION	100	100	10000	10000	10000
				30439		30439