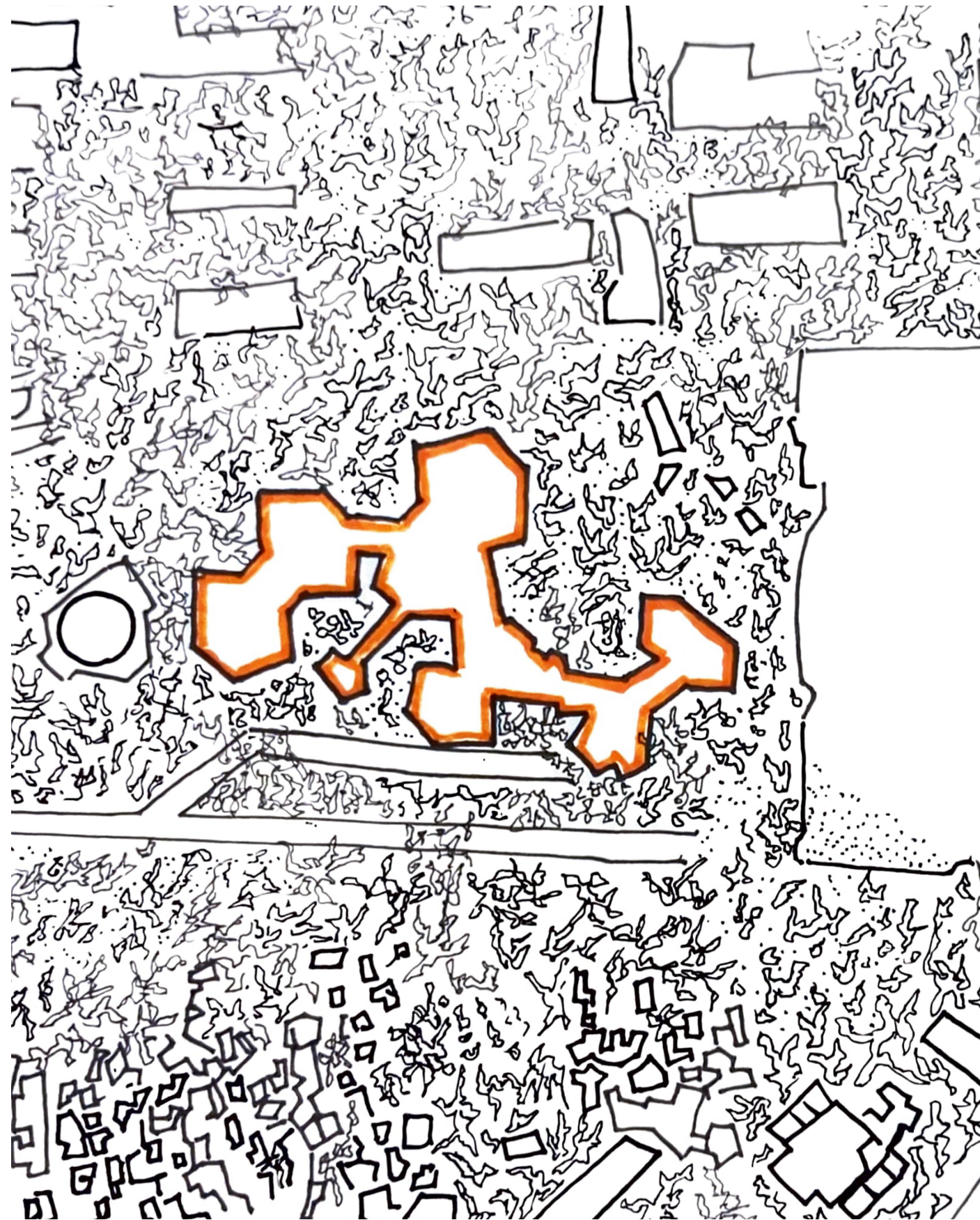


SPATIAL HISTORY

MUSEUM TYPES

# PORTFOLIO ..



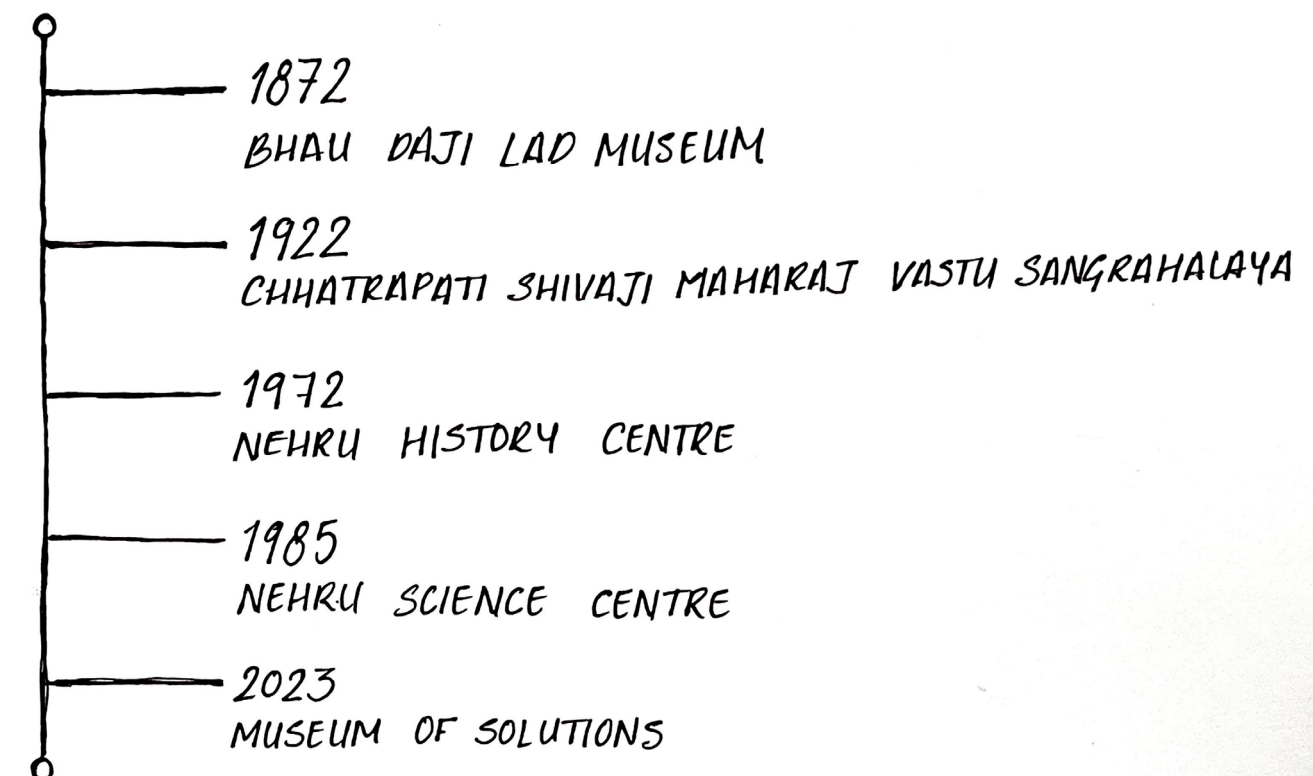
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## .02 THE ANALYSIS

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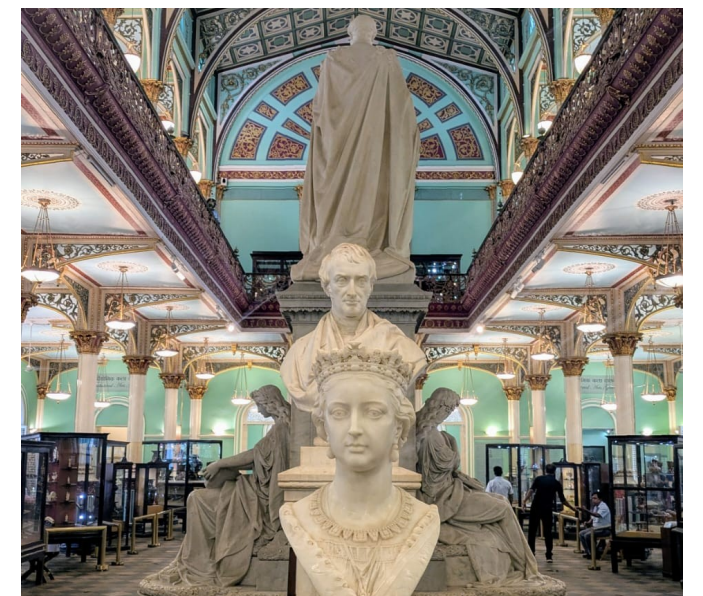
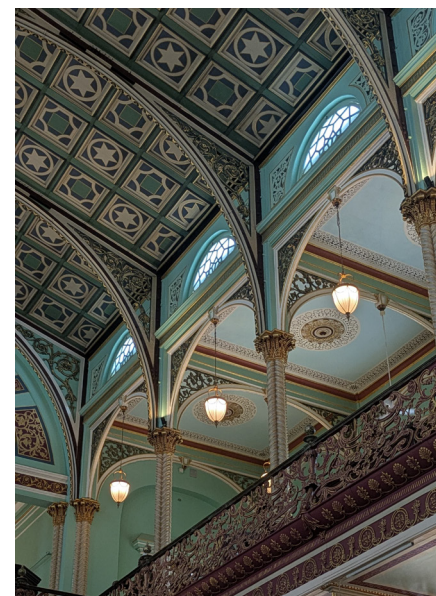
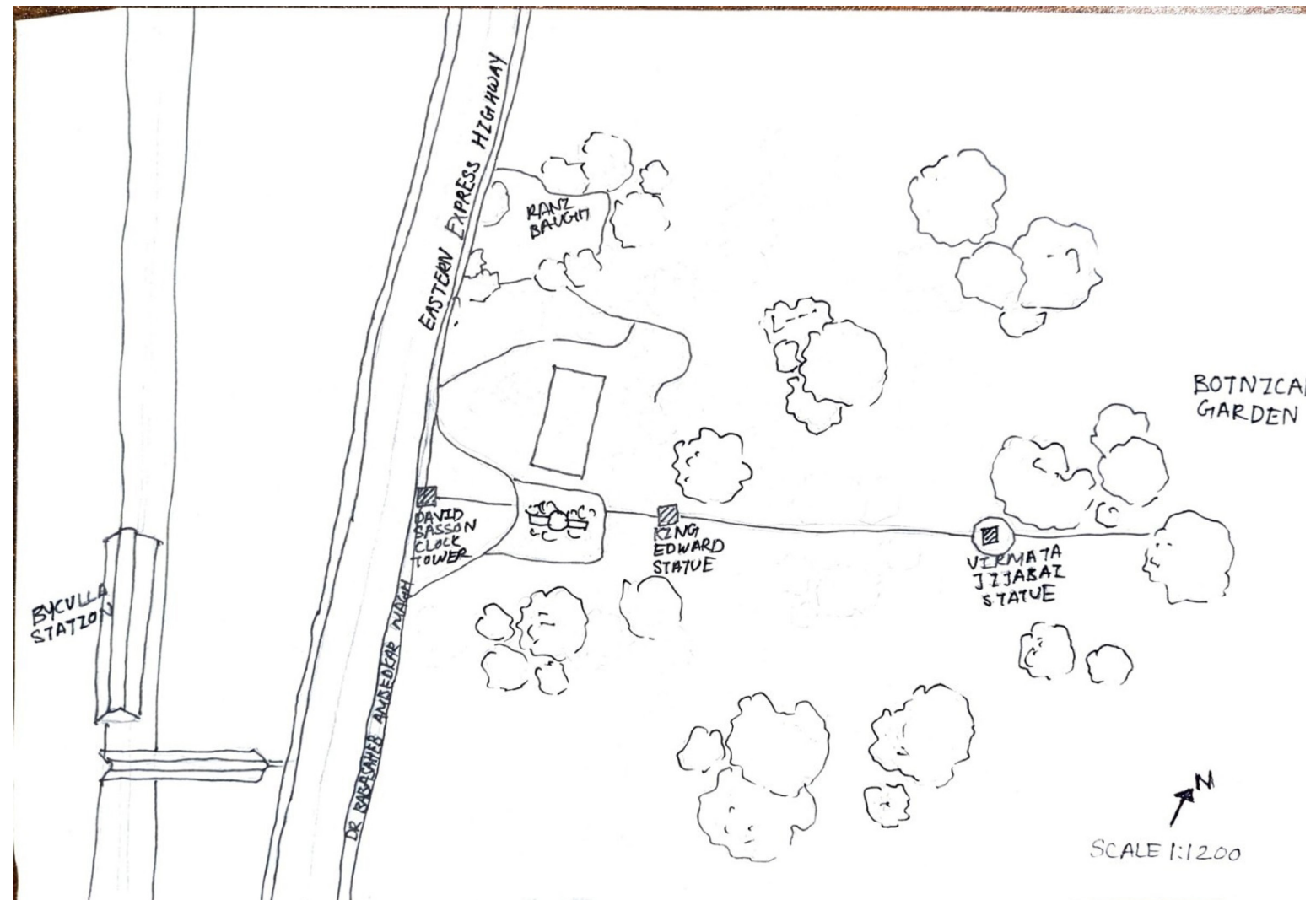


# 1.1 THE BHAU DAJI LAD MUSEUM

Dr. Bhau Daji Lad Museum originally name as the Victoria & Albert Museum was constructed between 1862-1871 with its official opening on 2 May 1872 , inaugurated by Sir Richard Temple. It is located in Byculla surrounding by botanical garden with 50-60 acres.

Bhau Daji Lad was Mumbai's first Indian doctor a scholar anda social reformer also he played key role in founding Mumbai's first museum reason afterwards museum was named by him. it was re inaugurated on Jan 8 2025 by Maha CM Fadnavis after a major restoration

Design of building includes colonial architectural type like symmetry, windows ,pillars, doors also Victorian style interior like brackets, posts, porch. When you first enter the building , first thing strikes is high ceiling, tall pillar , stained curved glass windows letting natural light in . Building contains only one core part , 4 private spaces & remaining open for public , there is window in between every pillars which lets air pass through from both side of building, building has one big rectangular open space between building letting visitors to pause and look the detailed work of every element of building from ground to first floor , building also has some workshop space behind the main museum building.

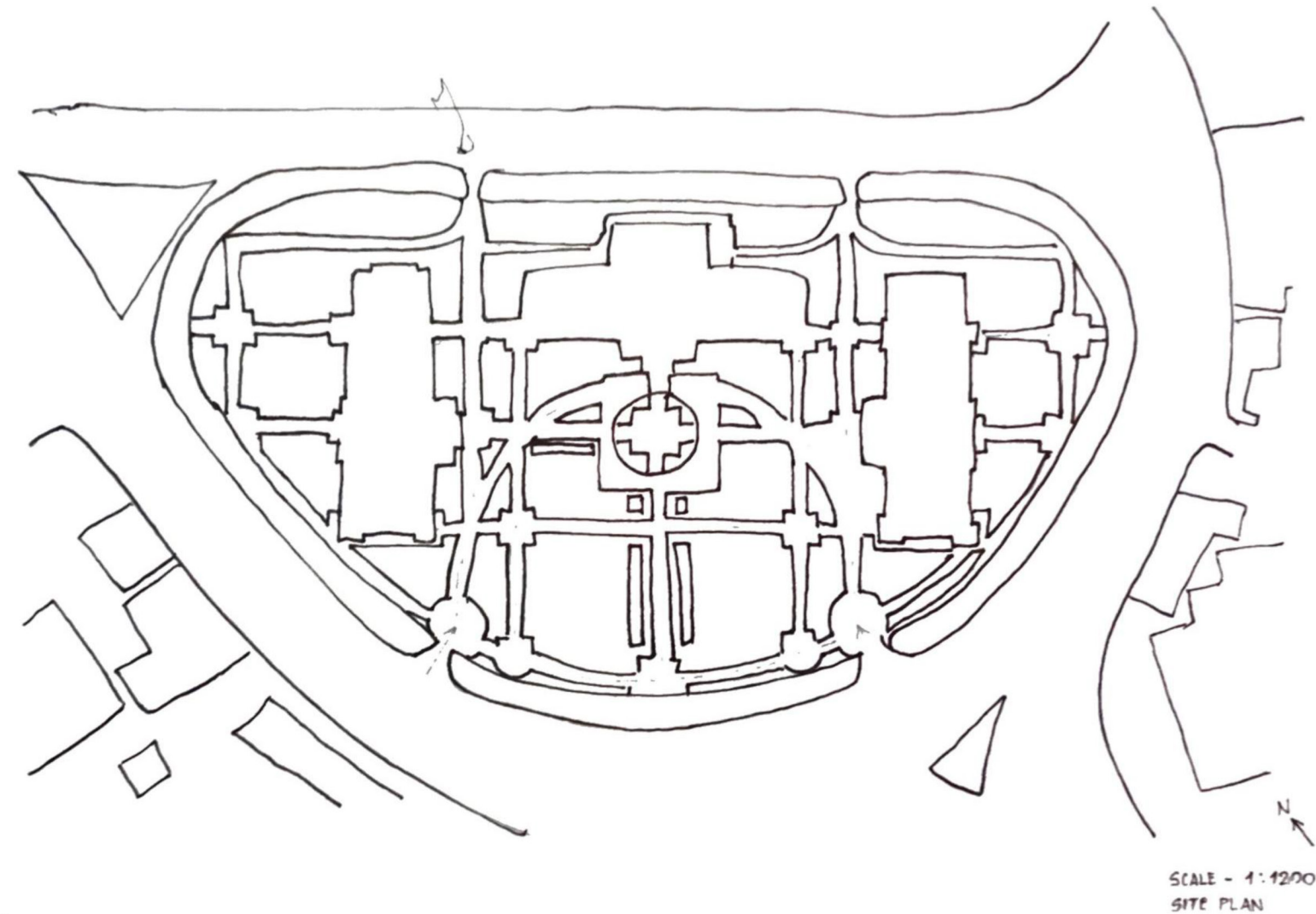


# 1.2 THE CSMVS

The Chhatrapati Shivaji Maharaj Vastu Sangrahalaya (CSMVS), formerly known as the Prince of Wales Museum of Western India, is a significant museum in Mumbai, India. The foundation stone was laid by Prince of Wales on 11th November 1905.

The museum building, designed by George Wittet, reflects the Indo-Saracenic architectural style. It incorporates elements from various Indian and European traditions. It's a Grade I Heritage building and a key landmark in Mumbai's Kala Ghoda Art Precinct. The structure features a large central dome and two smaller domes, set within a garden. The Indian pillared hall, the arched pavillion, and the dome rising above the huge intersecting arches form a beautiful geometrical pattern - all these together make the museum building a typical example of Indo - Saracenic style. Small jais for light and wind add to the grandeur of the building.

George Wittet skillfully incorporated the original wooden arched pavillion purchased from a royal house (wada) at Nashik in Maharashtra, as a circular railing on the first floor of the building. The dome of this building is designed after the Gol Gumbaz of Bijapur and the finial is copied from the Taj at Agra. The building was completed in 1914 but it opened to the public much later on 10th January 1922. Till then it was used by the military as a hospital and for the Children's Welfare Exhibitions.

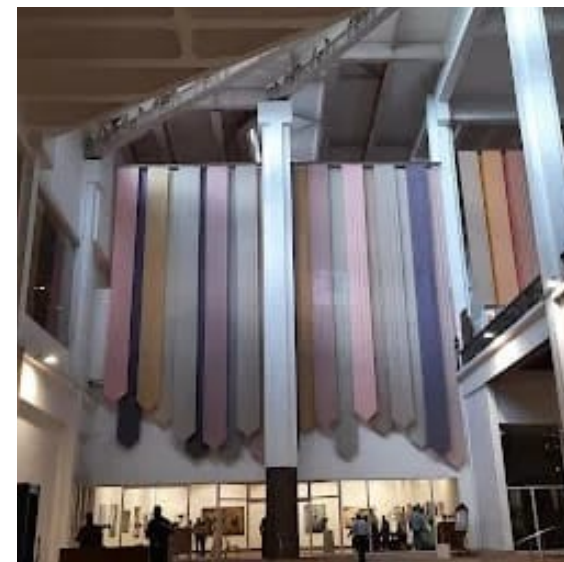
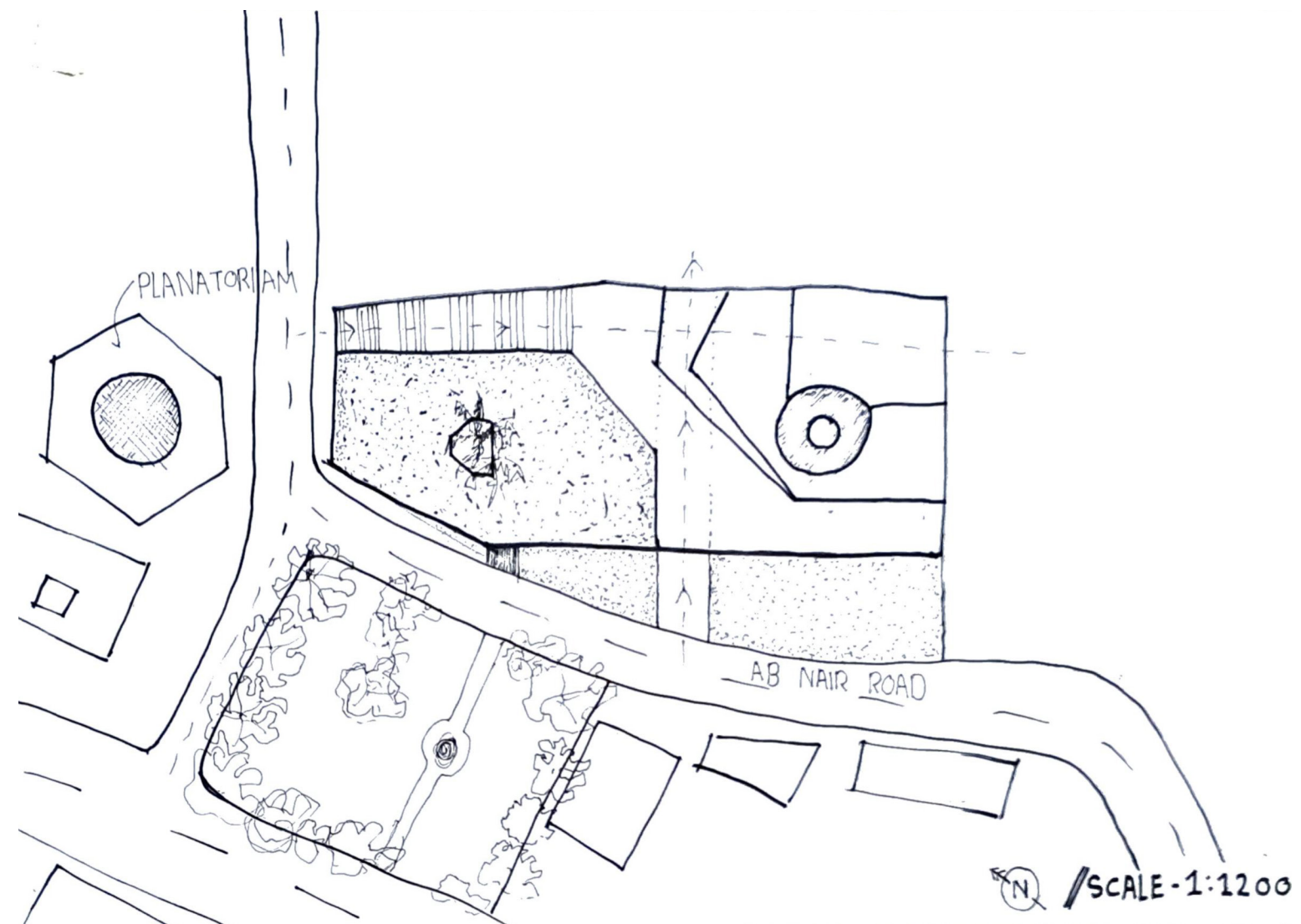


# 1.3 THE NEHRU HISTORY CENTRE

The Nehru Centre, located in Worli, Mumbai, is a cultural and educational institution established in memory of India's first Prime Minister, Pandit Jawaharlal Nehru. Designed by the architect I.M. Kadri, th. Completed in 1989, which covers an area of about 15,000 Square meters . the Nehru Centre is a significant example of post-independence Indian architecture, embodying progressive ideals.

The architectural design follows strong structural principles where elements like jali and diagrid structure play a crucial role in shaping the form and function of the building.. The entire design can be broken in solid geometric form as cuboid which embodies the exhibition space and wedge which holds the landscape above and theatre below forms the base and cylinder penetrated on the cuboid with a diagrid structure for façade

The sloped landscape surrounding the Nehru Centre draws inspiration from India's agricultural heritage and Mughal gardens, creating a serene and symbolic environment that speaks of the country's deep connection to land and nature One of the most striking visual metaphors of the Nehru Centre is the spiral form rising from the base of the tower which is 14 floors high , which represents the aspiring vision of Nehru for a free and progressive India. The white concrete façade, open exhibition spaces, Kadri's vision of a space that encourages learning, creativity, and dialogue. .

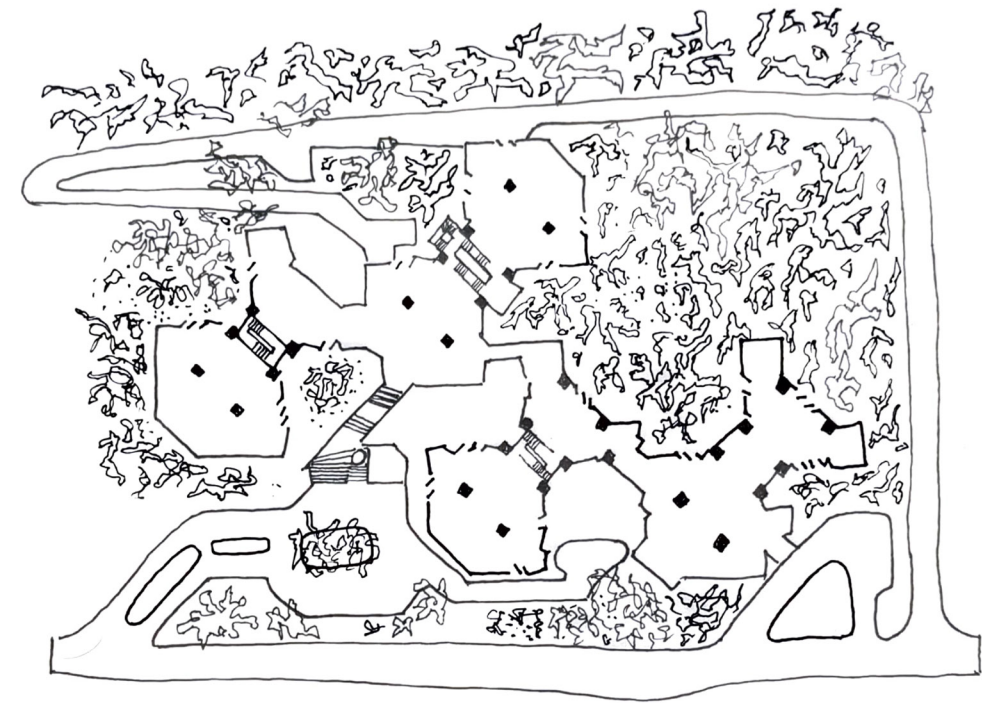


# 1.4 THE NEHRU SCIENCE CENTRE

The Nehru Science Centre in Mumbai is vast and interactive science museum dedicated to educating and inspiring through hands-on exhibits, live demonstrations, and large-scale installations. Construction completed in 1977 and was opened for public in 1985, it is one of India's largest science centres, named after India's first Prime Minister, Jawaharlal Nehru, a strong advocate for scientific temper.

Architecturally, the Centre embraces modernist design principles. Its lowrise, which campus extends over roughly 350,000 square feet, integrating built form and landscape in a way that encourages exploration. The structure is gently sloping ramps and stepped terraces that guide visitors through interior spaces organized as a sequence of interactive galleries. Sunlight filters in through glazed atria and clerestories, creating a dynamic atmosphere that changes throughout the day.

The Nehru Science Centre is designed as a progressive learning journey, moving from entry to exhibitions to outdoor exploration. Its spatial layout prioritizes ease of movement, thematic zoning, and strong indoor-outdoor connectivity, all crafted to spark curiosity and exploration



SITE PLAN

SCALE:- 1:1200

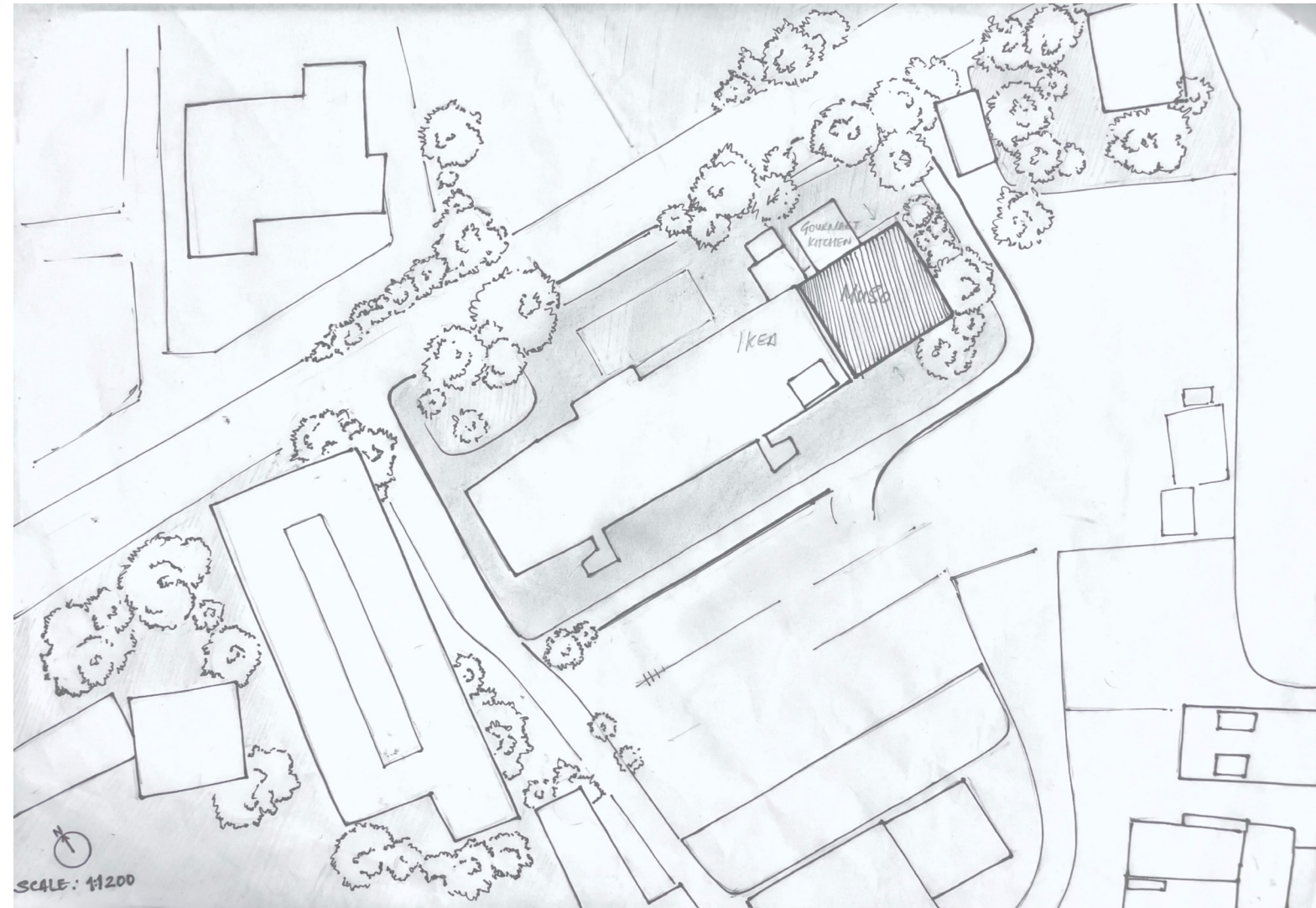


# 1.5 THE MUSEUM OF SOLUTIONS

Located in Victoria House, Kamala Mills Compound, Lower Parel, Mumbai. Built on a former textile mill plot—Victoria Mills. 10 storey vertical museum - unusual for museums, Adaptive reuse of an industrial building Accessibility, and open, interactive spaces. built in 2023 .

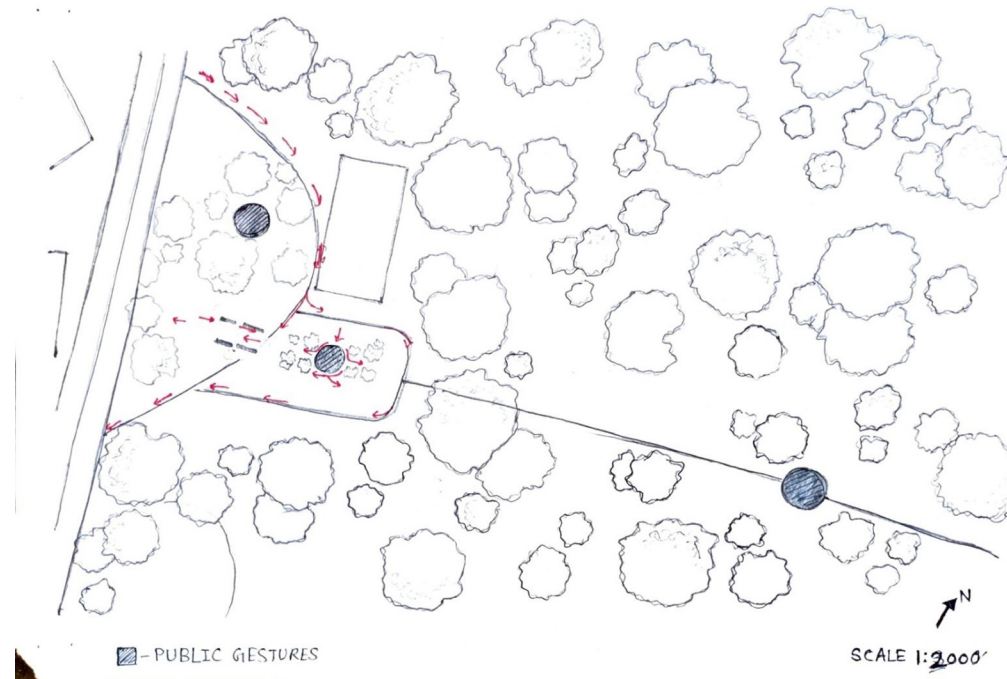
Vertical stacking across 10 floors enables space optimization in a dense urban context. Reinforced retrofitting of the old mill building after a partial collapse in 2012. Originally part of Girangaon engaged in cotton fabric production. Decline of mills began in 1980s; accelerated by the 1982 textile strike. Plot redevelopment enabled by 1990s policy (DCR 58) that allowed mill-to-commercial conversion. Site saw unregulated commercialization in the 2000s; including rooftop restaurants, eventually leading to: 2012: Structural collapse in Victoria House, 2017: Kamala Mills fire tragedy.

Thematic floors, such as: Play the City: urban planning simulation. ,Empathy Lab: role-play and perspective taking. ,Maker Studio: hands-on innovation space. ,Future Foods: explore food security and sustainability. ,Modular and changeable exhibits, updated regularly. ,Children participate as active agents, not passive observers. ,Uses AR, digital tools, and physical tasks to encourage systems thinking.

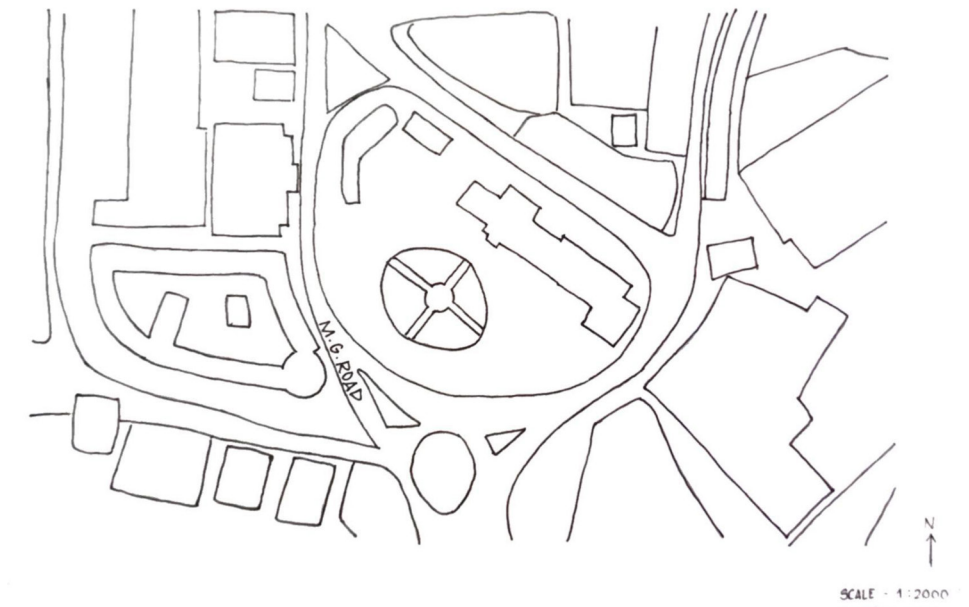


## 2.1 LOCATION / LANDMARKS

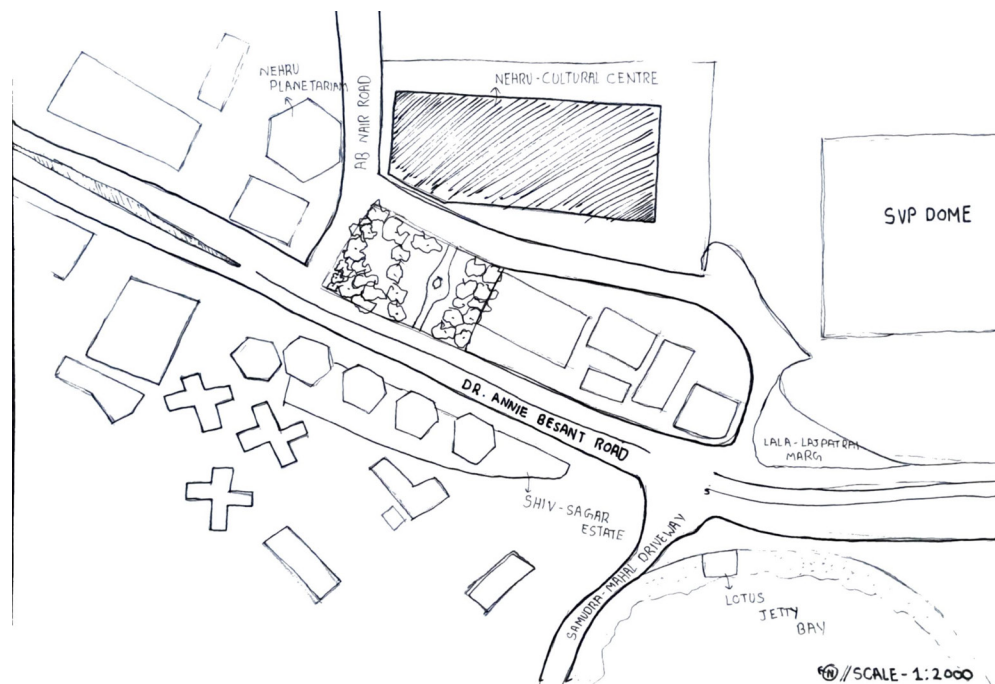
The five structures reflect distinct urban narratives through their locations. Bhau Daji Lad Museum, nestled in Byculla's heritage precinct, anchors colonial memory within a botanical garden. CSMVS, in Fort near the Gateway Of India, occupies a ceremonial axis in Mumbai's historic core. Nehru History Centre and Nehru Science Centre, both in Worli, form a part of an institutional corridor bridging education and public engagement. Museum of Solutions, embedded in Lower Parel's dense commercial fabric, reclaims vertical space for child centric innovation.



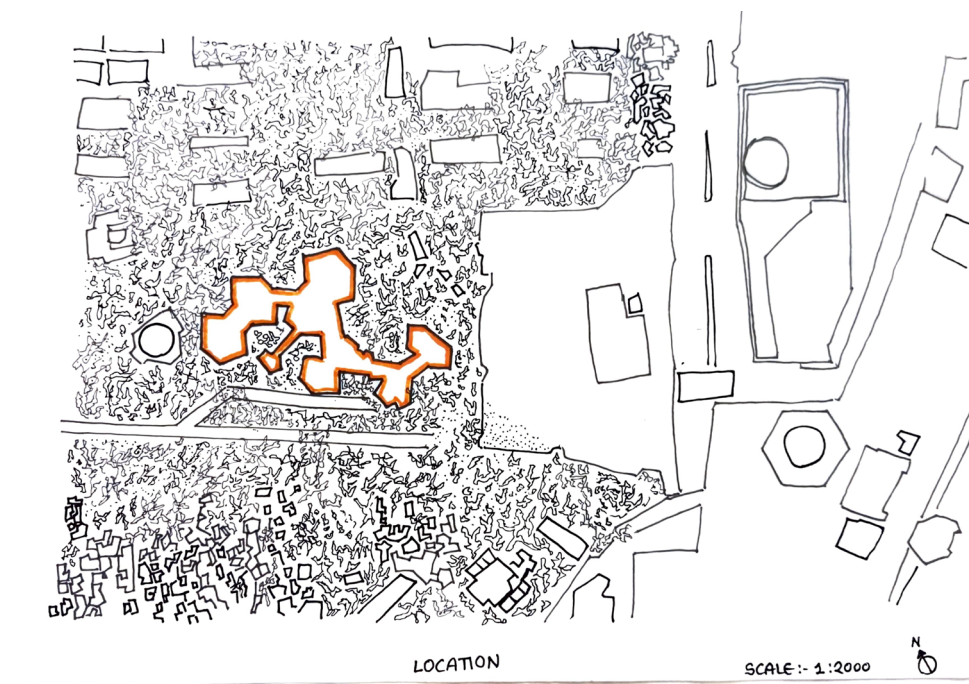
BHAU DAJI LAD MUSEUM



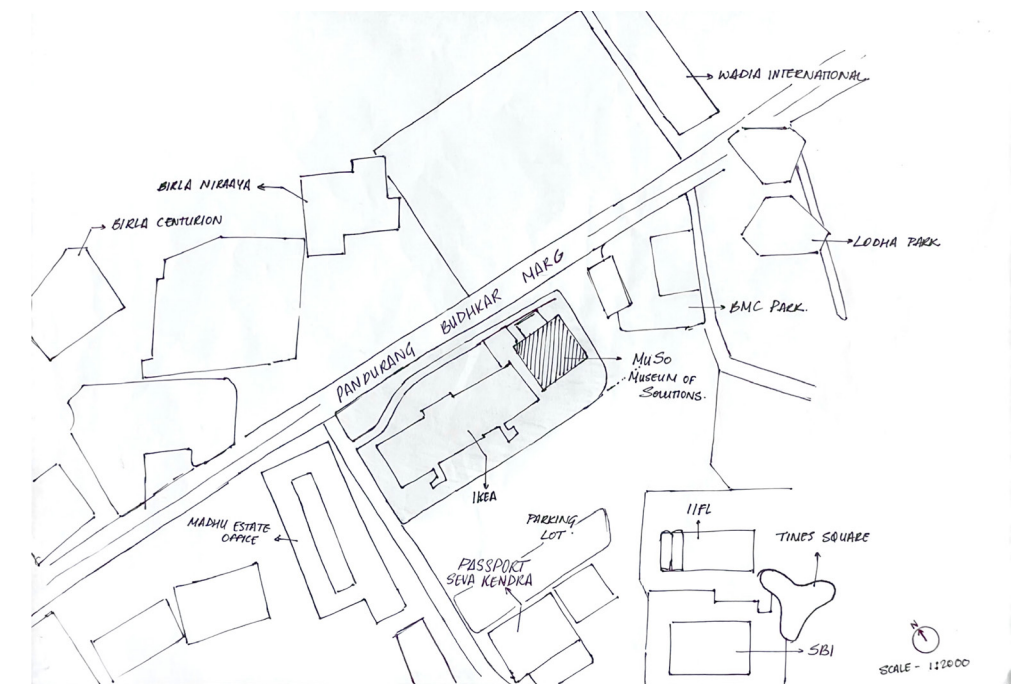
CSMVS



NEHRU HISTORY CENTRE



NEHRU SCIENCE CENTRE

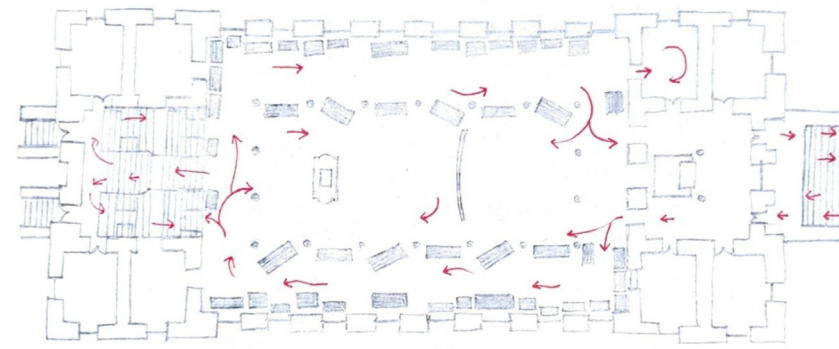


MUSEUM OF SOLUTIONS

## 2.2 CIRCULATION

The circulation patterns in five museum structures across different periods reveal a distinct evolution. Early museums like the Dr. Bhau Daji Lad Museum and the Chhatrapati Shivaji Maharaj Vastu Sangrahalaya featured rigid, linear circulation routes. Exhibits were placed methodically along halls and walkways, guiding visitors in a set direction limiting interaction.

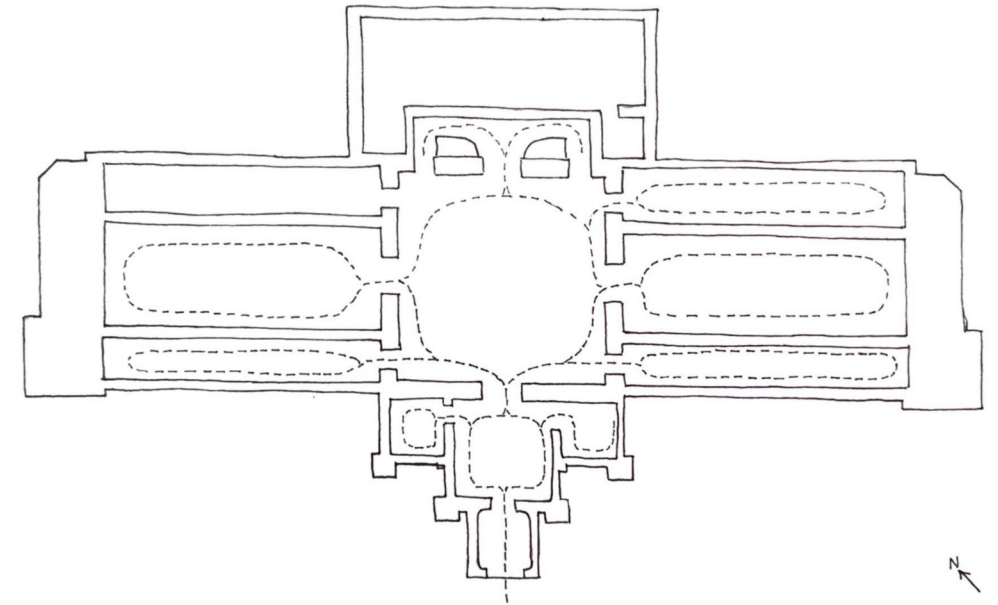
In contrast, later museums such as the Nehru Science Centre, Nehru Cultural Centre, and the Museum of Solutions embraced free-flowing circulation. These spaces offer a more dynamic and engaging visitor experience, with flexible exhibit arrangements that invite exploration,



■ - MOVEABLE  
□ - UNMOVEABLE

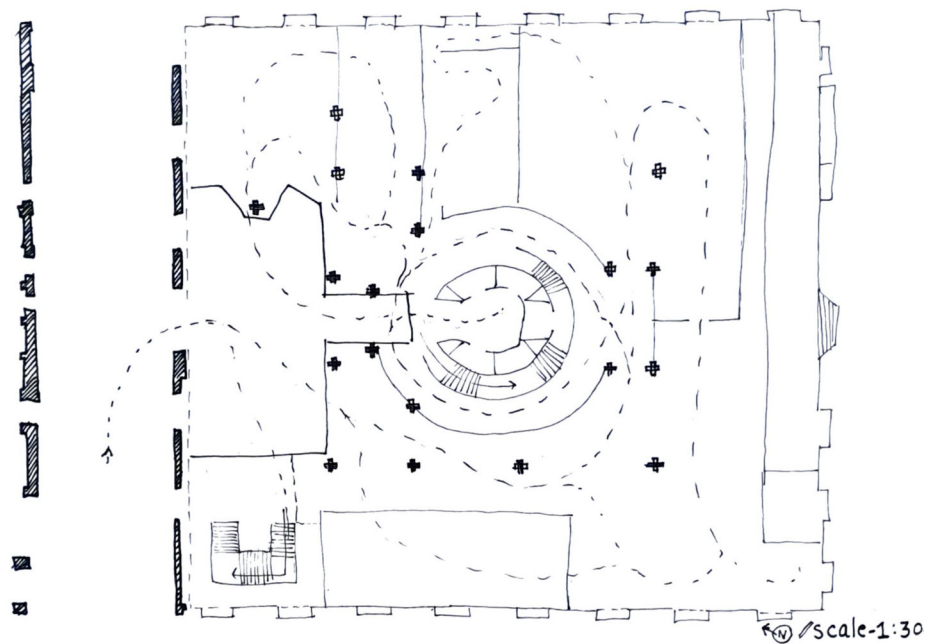
SCALE 1:300

BHAU DAJI LAD MUSEUM



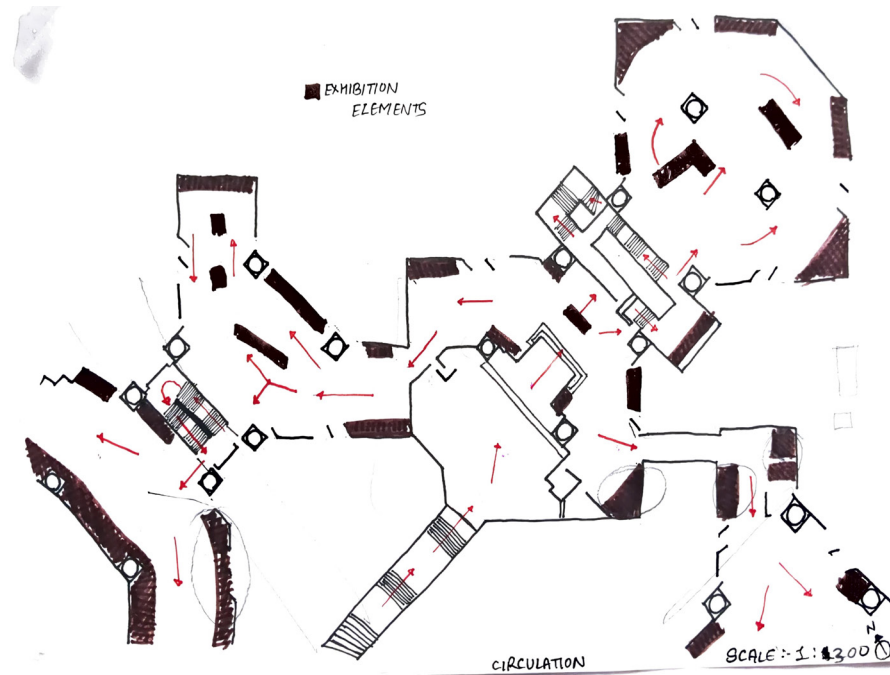
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SCALE - 1:500  
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CSMVS



Scale-1:30

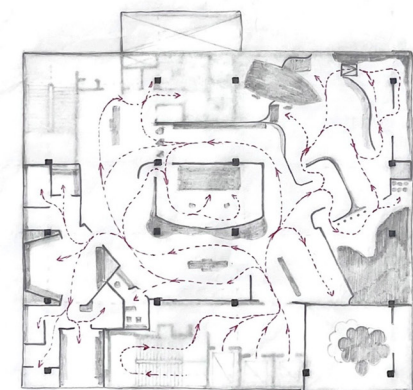
NEHRU HISTORY CENTRE



CIRCULATION

SCALE - 1:300

NEHRU SCIENCE CENTRE

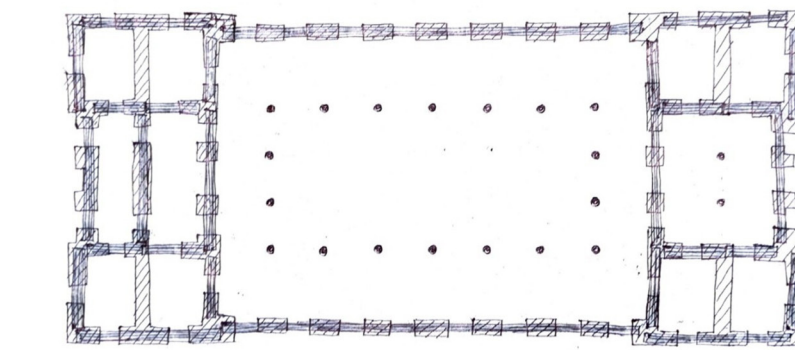


CIRCULATION  
SCALE - 1:30

MUSEUM OF SOLUTIONS

## 2.3 MASS AND VOID

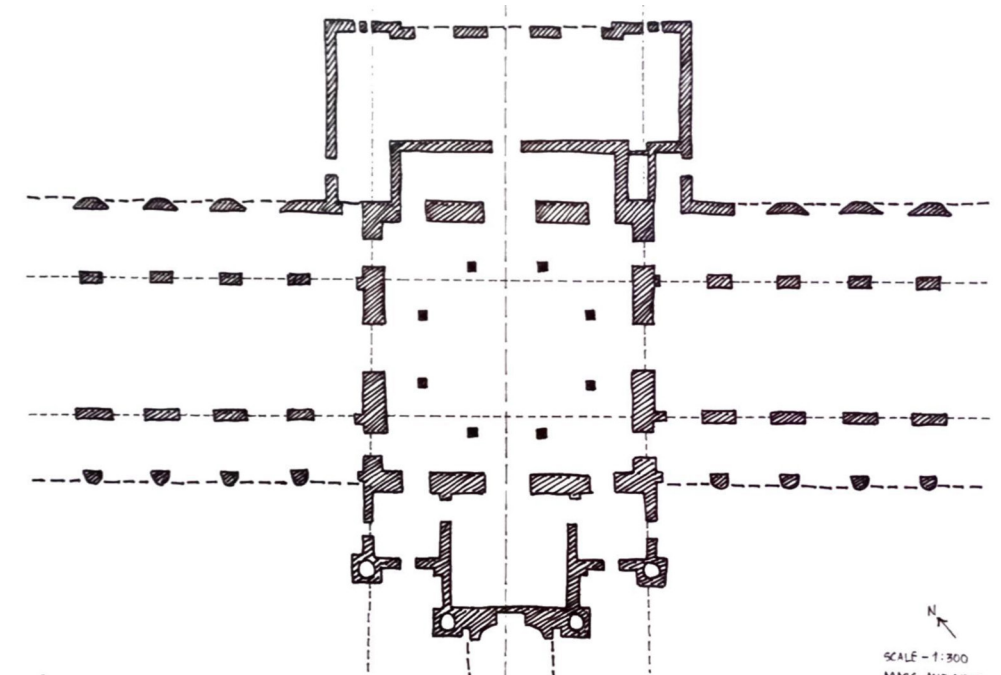
Across the five museums, the architectural interplay between mass and void reveals evolving spatial ideologies. Bhaui Daji Lad emphasizes dense, symmetrical enclosure with ceremonial voids. CSMVS balances solid Indo - Saracenic massing with courtyards and vertical light shafts. Nehru History Centre dramatized ascent through a spiral void within a symbolic cylindrical mass. Nehru Science Centre embraces brutalist solidity punctuated by skylight and sectional shifts, crafting exploratory voids. Museum of Solutions, by contrast, foreground permeability - tiered glazing and double height volumes cultivate openness and interaction.



▨ - WALLS  
 ■ - COLUMNS  
 - - BEAMS

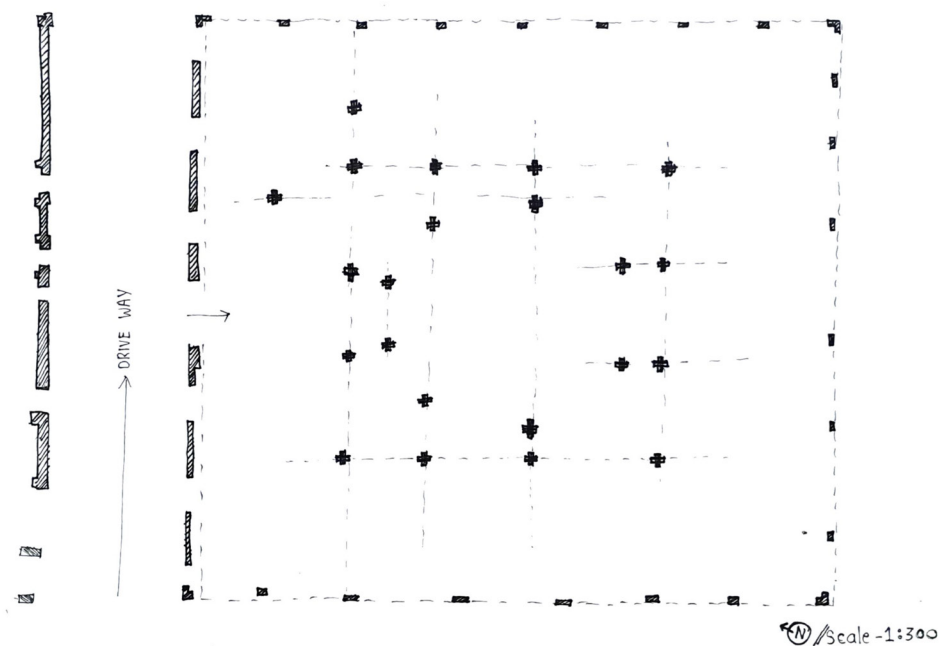
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BHAUI DAJI LAD MUSEUM



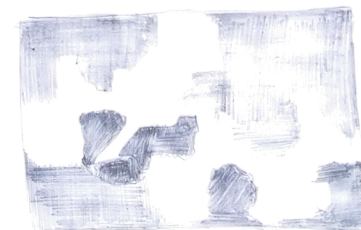
N  
 SCALE - 1:300  
 MASS AND VOID

CSMVS



Scale - 1:300

NEHRU HISTORY CENTRE

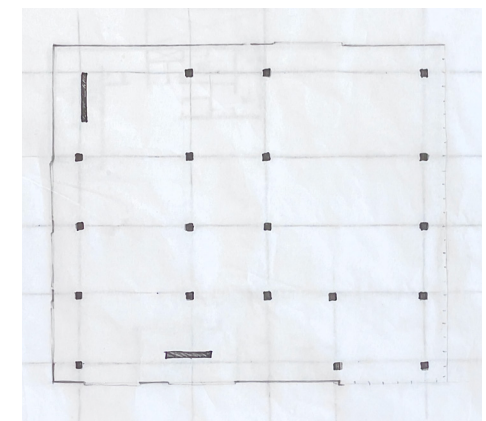


■ MASS  
 □ VOID

MASS & VOID

SCALE: 1:1200

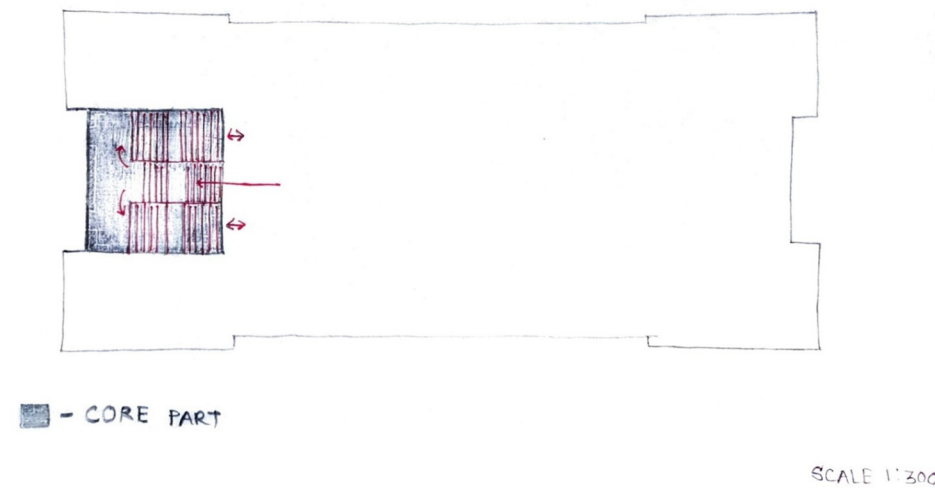
NEHRU SCIENCE CENTRE



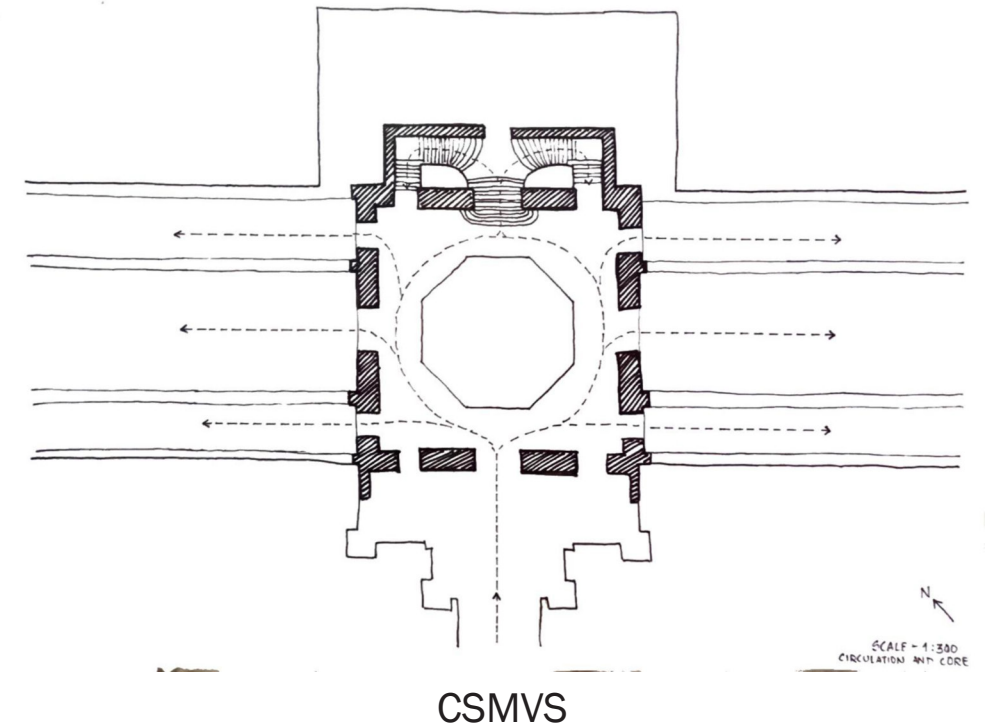
MUSEUM OF SOLUTIONS

## 2.4 CORE

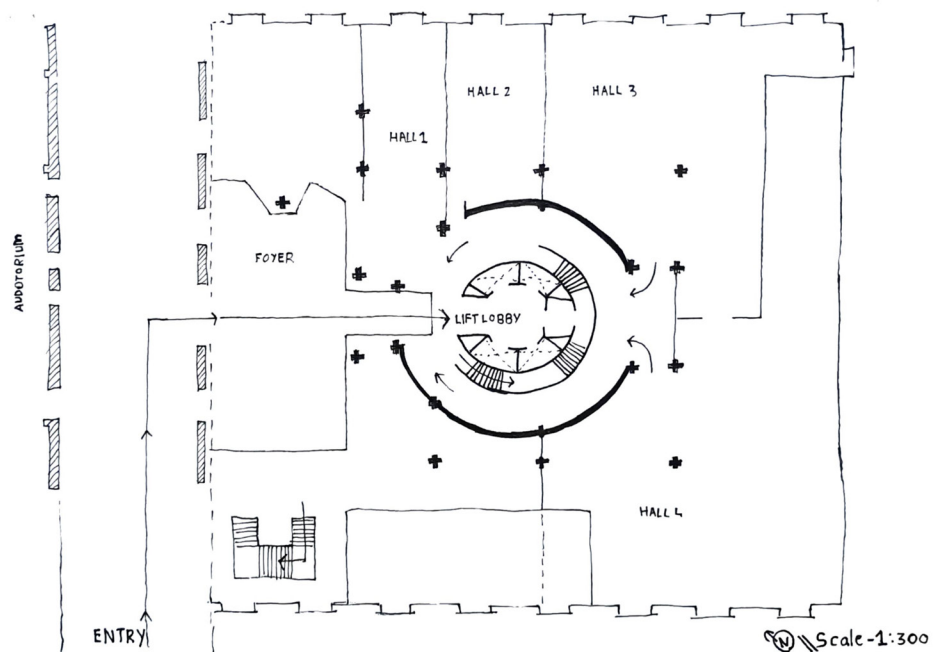
The analysis of 5 buildings shows that all five buildings have a core but different types and purposes. Bhau Daji Lad Museum has a central hall and a symbolic and spatial core, CSMVS has an octagonal atrium under the dome that connects the wings and it has a visual and circulatory core, Nehru Science Centre which is built in module system has service shafts and vertical circulation cores embedded in each module, Nehru History Centre has a spiral ramp and a jaali tower with an ideological core, and in the Museum of Solutions the core is the main stairwell which is not centralized but to a side.



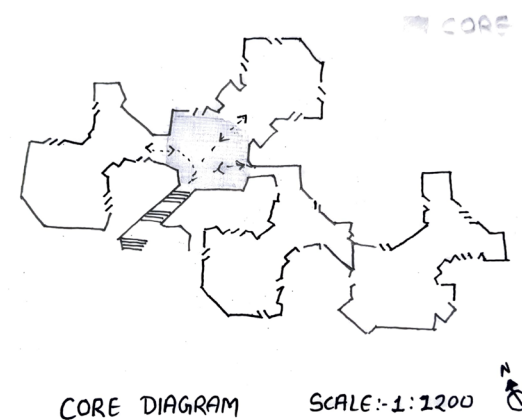
BHAU DAJI LAD MUSEUM



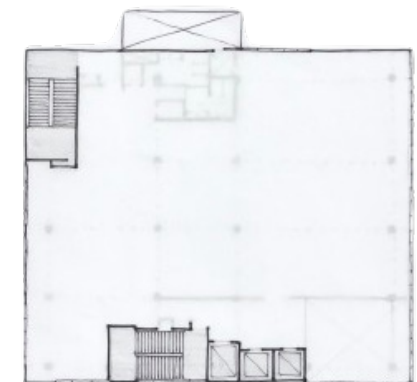
CSMVS



NEHRU HISTORY CENTRE



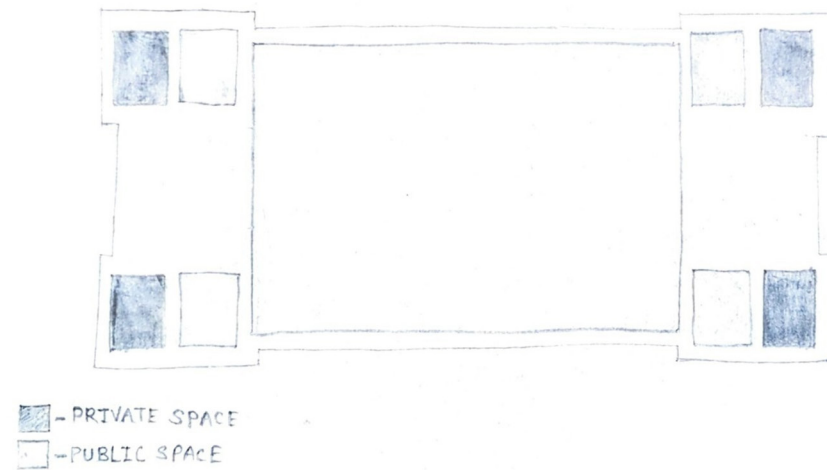
NEHRU SCIENCE CENTRE



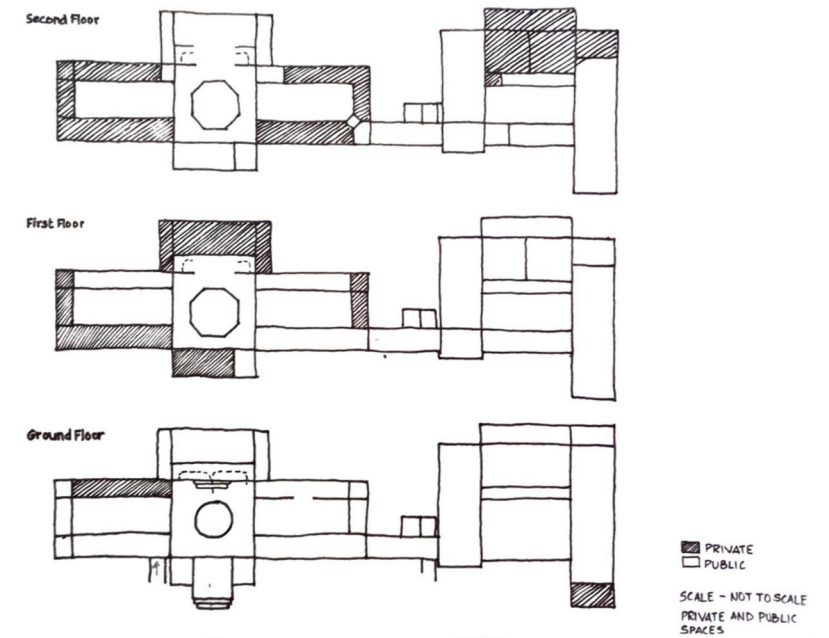
MUSEUM OF SOLUTIONS

## 2.5 PRIVATE AND PUBLIC SPACES

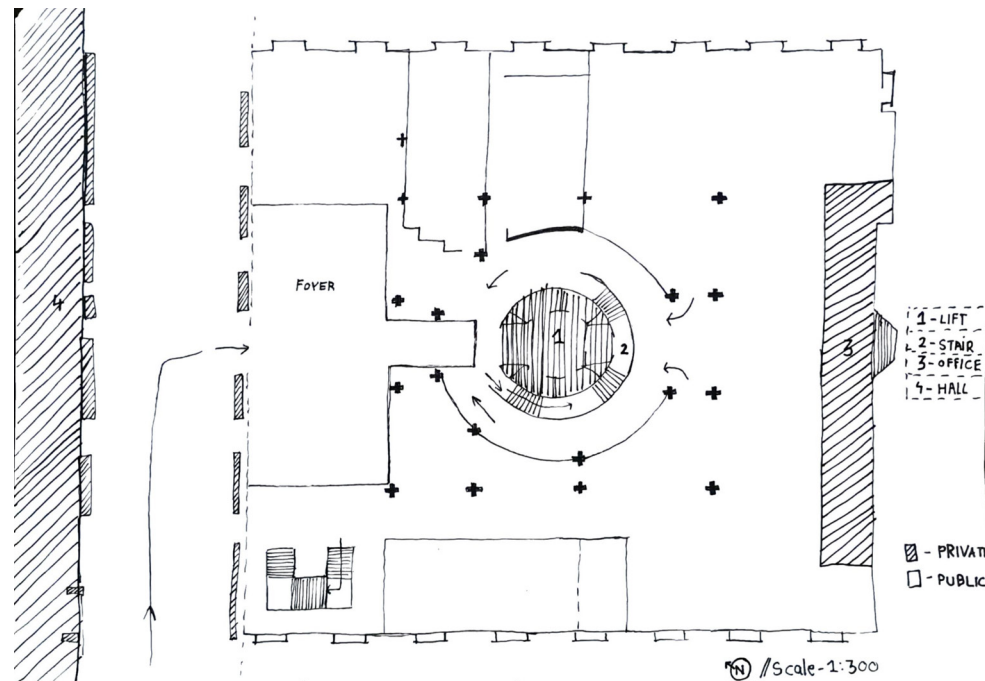
Bhau Daji Lad Museum maintains a formal separation—grand public galleries contrast with tucked-away curatorial zones and mezzanine offices. CSMVS integrates public courtyards and ceremonial halls with discreet archival and administrative wings. Nehru History Centre blurs boundaries through its spiral ramp, where ideological ascent merges public exhibition with semi-private reflection. Nehru Science Centre uses sectional shifts to modulate access—open science park versus enclosed labs and workshops. MuSo redefines permeability: double-height commons, glazed façades, and interactive zones dissolve barriers, fostering participatory engagement.



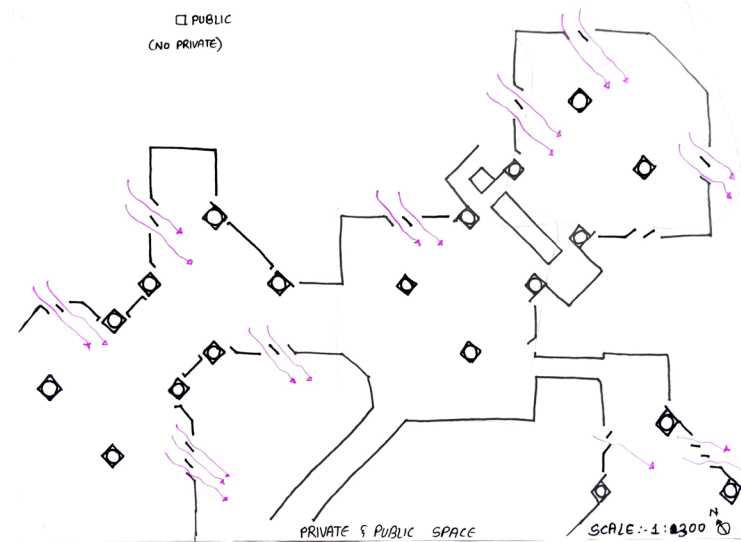
BHAU DAJI LAD MUSEUM



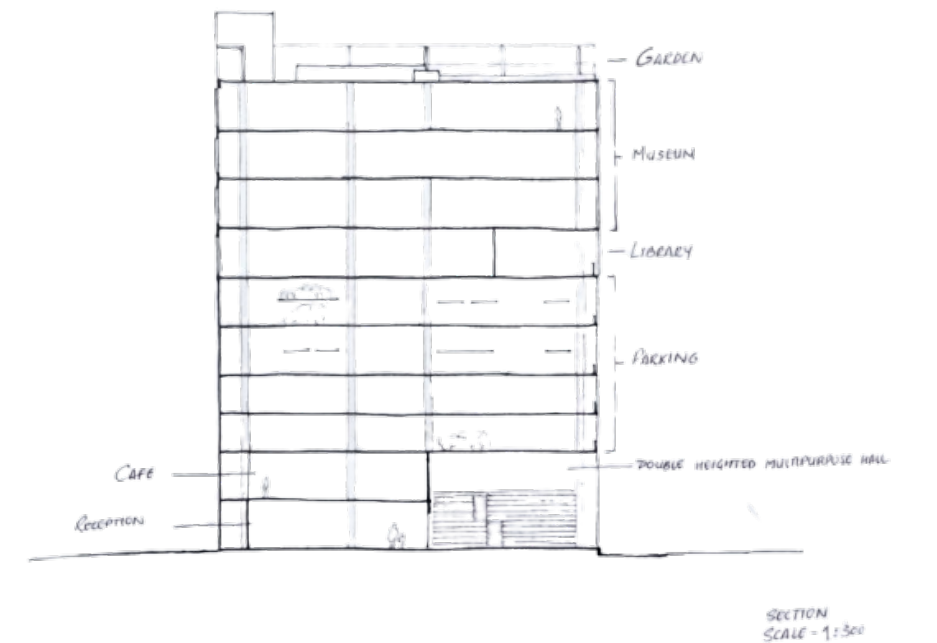
CSMVS



NEHRU HISTORY CENTRE



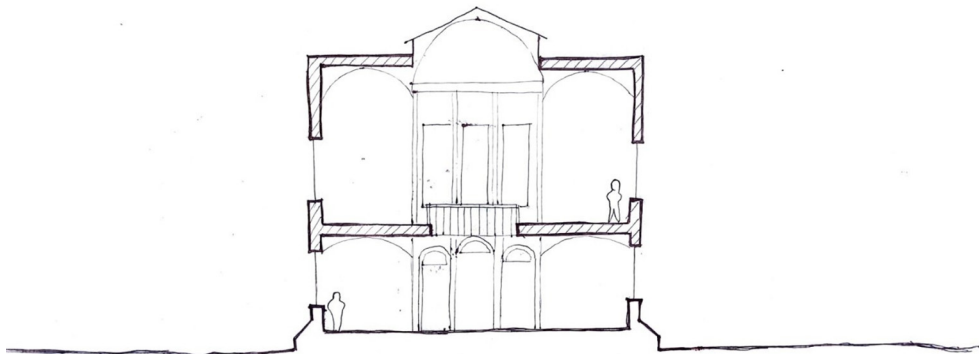
NEHRU SCIENCE CENTRE



MUSEUM OF SOLUTIONS

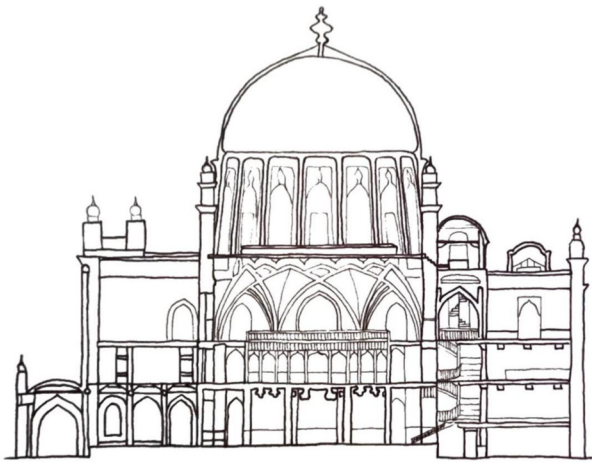
# 2.6 SECTION

Bhau Daji Lad Museum employs classical single-height volumes with a mezzanine, reinforcing symmetry and containment. CSMVS layers galleries around a central atrium beneath a dome, creating vertical drama and ceremonial ascent. Nehru History Centre used a spiral ramp within a cylindrical mass, symbolizing ideological progression and upward movement. Nehru Science Centre adopts split-level hexagonal modules, embracing topographic variation and dynamic circulation. Museum of Solutions features open floor plates with double-height voids and glazed facades, prioritizing daylight, flexibility, and immersive engagement. These sections trace a shift from formal hierarchy to participatory spatial openness.



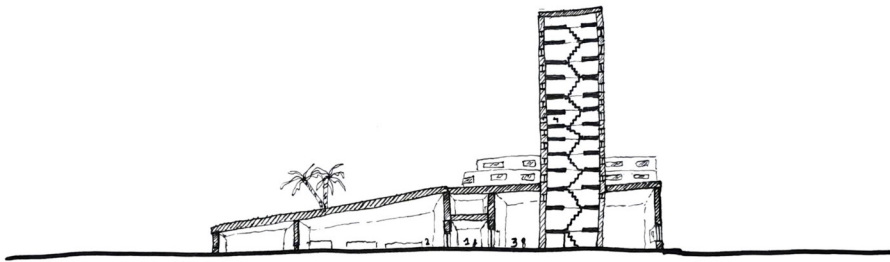
SCALE 1:300

BHAU DAJI LAD MUSEUM



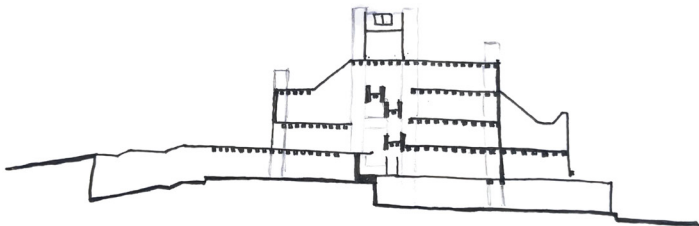
SCALE - 1:500  
SECTION

CSMVS



- 1- DRIVE WAY
  - 2- AUDITORIUM
  - 3- EXHIBITION
  - 4- OFFICES
- Scale-1:1200

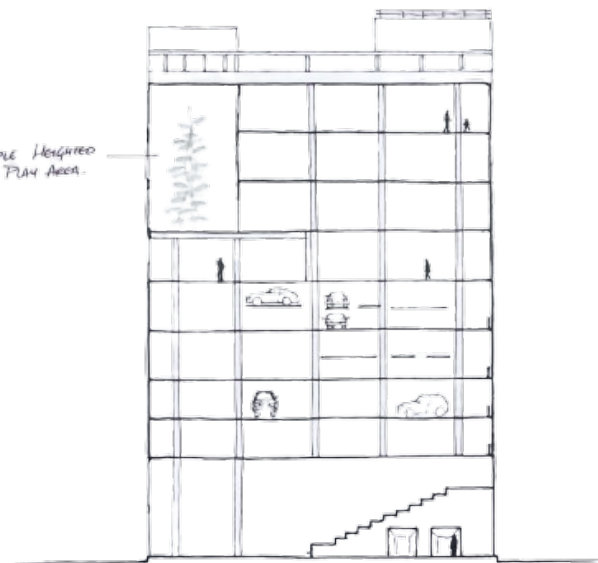
NEHRU HISTORY CENTRE



SECTION

SCALE - 1:500

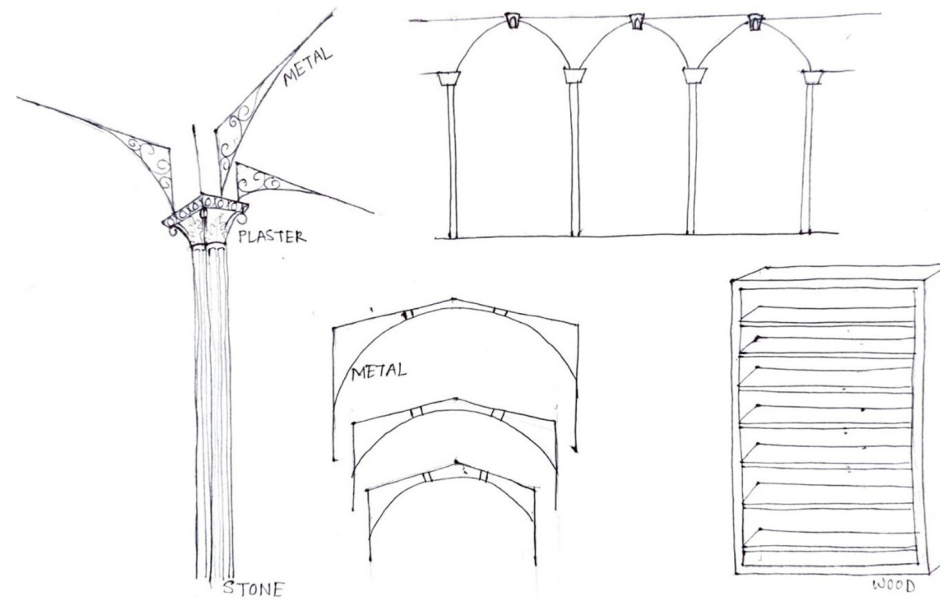
NEHRU SCIENCE CENTRE



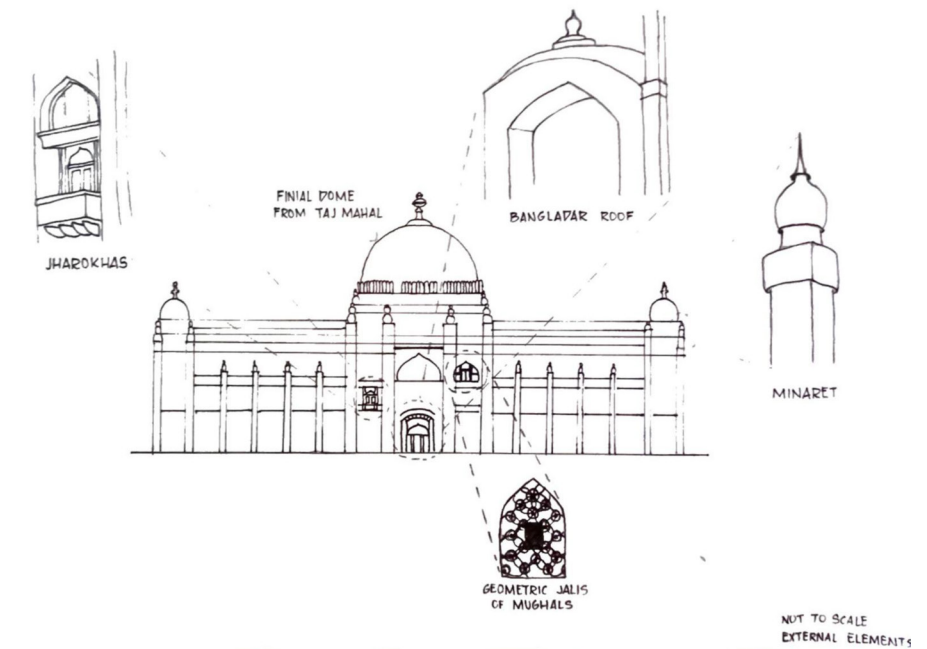
MUSEUM OF SOLUTIONS

## 2.7 ELEMENTS

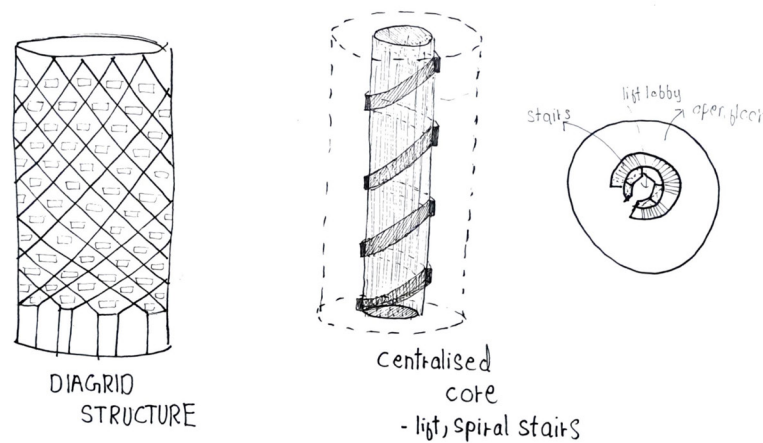
Bhau Daji Lad Museum features renaissance revival elements - Corinthian columns, Minton tiles and, Venetian glass - evoking colonial grandeur. CSMVS blends Indo - Saracenic motifs like onion domes, lotus bases, and temple-inspired pavilions. Nehru History Centre employs fretwork jaalis and spiral ramps, symbolizing ascent and ideology. Nehru Science Centre embraces brutalist aesthetics - waffles slab, grit plaster, and skylight- prioritizing modularity and functionality. Museum of Solutions exhibits interactive problem-based installations. Instead of static displays, there are modular and changeable exhibits.



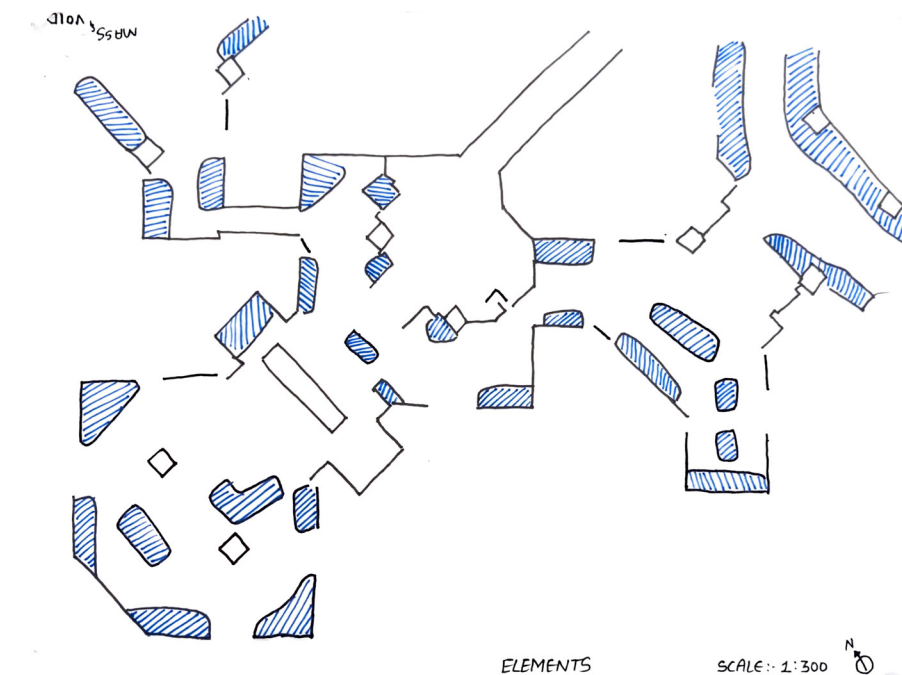
BHAU DAJI LAD MUSEUM



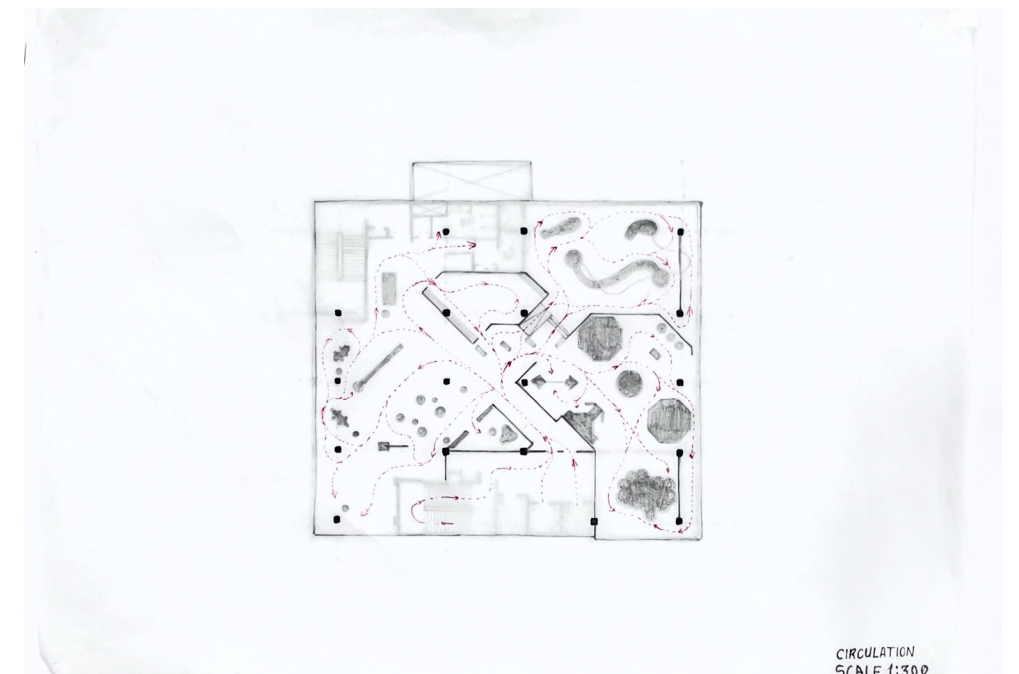
CSMVS



NEHRU HISTORY CENTRE



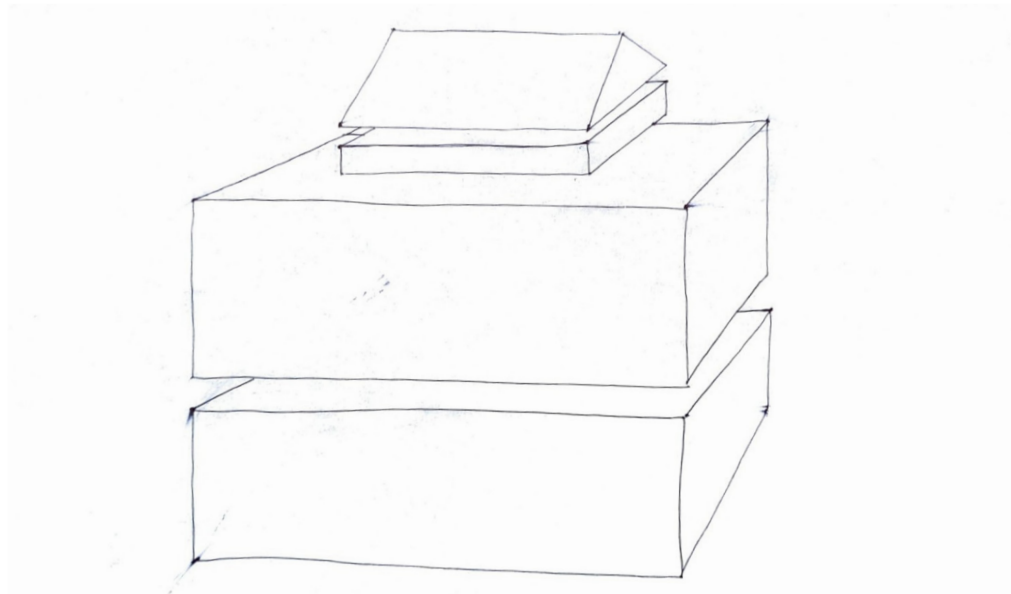
NEHRU SCIENCE CENTRE



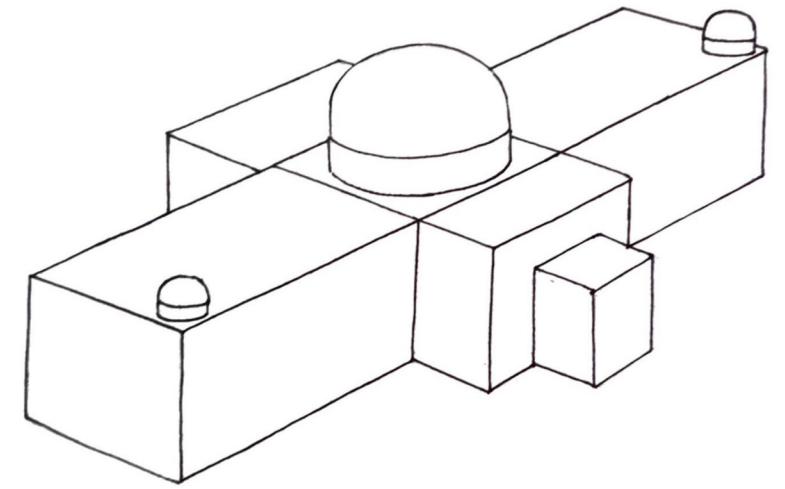
MUSEUM OF SOLUTIONS

## 2.8 GEOMETRIC FORM

During the analysis of all five museum structures, it becomes evident that each one presents a composition of simple geometric forms. The Bhau Daji Lad Museum can be seen as a pure cuboid, while the CSMVS is a combination of multiple cuboids and a prominent hemispherical dome. The Nehru Science Centre is organized around modular geometries, emphasizing repetition and clarity. The Nehru Centre blends a cuboid base with a wedge and cylindrical tower, reflecting dynamic interaction of forms. In contrast, the Museum of Solutions is defined by a clean, extruded cube, representing a minimalist and modern design approach.

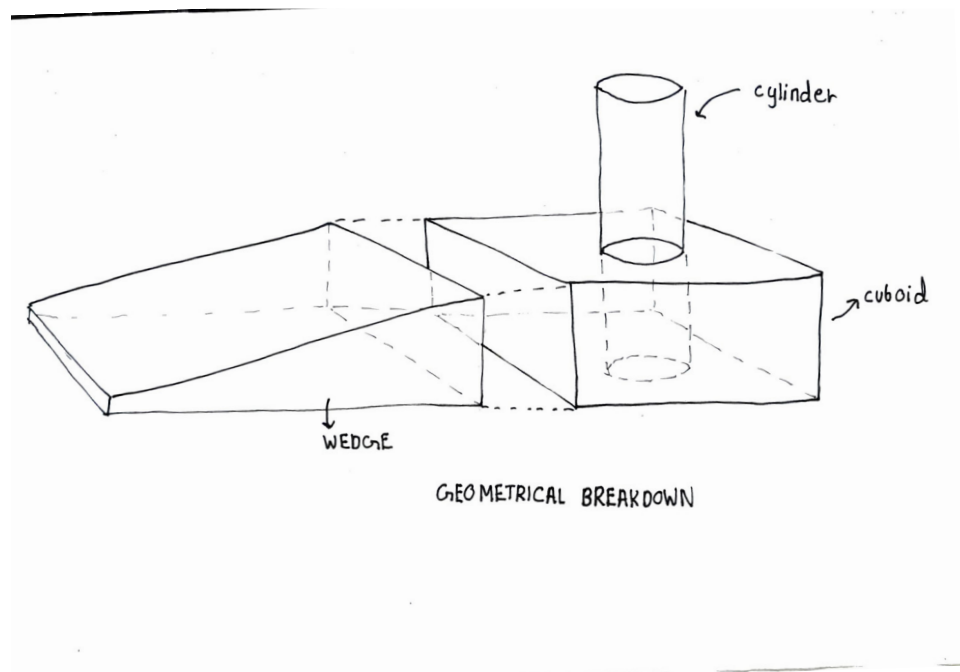


BHAU DAJI LAD MUSEUM

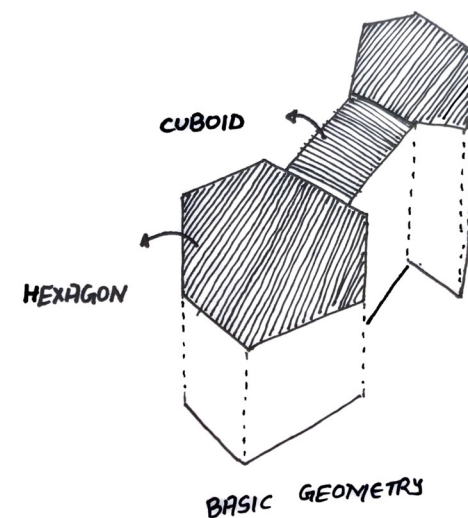


NOT TO SCALE  
GEOMETRY

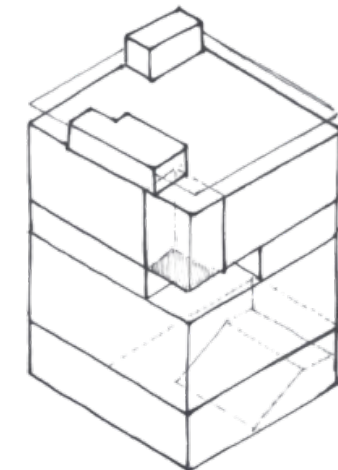
CSMVS



NEHRU HISTORY CENTRE



NEHRU SCIENCE CENTRE



MUSEUM OF SOLUTIONS

# TEAM

AADESH AWALE

MAHI DATTANI

MANJIRI GAIGOLE

JUHI IYENGAR

UPANSHU SAKHALA