

A Design Approach to the Architectural Spaces: for the Administrative Building

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Abstract

The paper describes about the study of administrative building under the Indian context using multiple case study approach, Administrative Building at Yeola & Municipal Council building, Baramati were chosen as case studies with emphasis on form and space studies. This paper offers new insights by formulating design approaches in designing administrative building.

Responsive Design Approach is a way of responding to the design situation. It means of translating the non-physical design problem into the physical building product. The integration of responsive components in architecture offers the potential to enhance the building in all aspects.

Keywords: Administration architecture, form and space study

1. Introduction

Like any other forms of architecture, administrative building carries a wide selection of vocabulary especially from the aspect of design characteristics. Administrative buildings serve multiple purposes. They are necessarily the centers of the community's political lives and the symbols of the whole community. Along with the social improvement, the relationship between government and the public, the role and functions of government in political activities also have got more or less development. Hence, this type of buildings' layout, environmental quality and characteristic of showing the administrative services has put forth their new requirements.

There were varied types and features of administrative buildings of different historical periods, which were closely related to the powers and duties of government along the period. Overall, the improvement of administrative building was closely related to squares. Under the sway of political power, it alternately showed open, public uniqueness of citizens and closed private characteristics of supremacy.

Present administrative architecture portrays a typical prototype box building with lack of aesthetics, services, without any local identity and values. It is vital because administrative buildings are treated as the symbol of political power and built as an icon to promote the city. Today's society needs to understand the role of administrative architecture and how the building should represent the identity of the town/city. This paper

focuses on documenting design characteristics on administrative architecture to produce suitable guidelines in designing better administrative building.

2. What is a design approach?

The approach, which will amalgamate all aspects for the design outcome i.e. functional, material, contextual, conceptual.

3. Definition of administrative architecture

Administrative building is a special type of architecture since early times: in the long historical process of development, administrative building developed concurrently with country and city. Its development process is closely associated with the country's political system and social relations; Its design is related not only to the city's economy, culture and other aspects, and more importantly, it is closely related to the political philosophy. *The definition of administration building*, means a building used as offices or for administrative or other like purposes by the head, a statutory body, a council or a party established for public purposes.

3.1 Method of study

The administrative building acts as medium between government and the public. Hence by taking into consideration the architectural elements viz. form, space that acts basis of this study. By doing so, research will undergo direct observations as its data collection & research approach.

3.2 Method of data collection

Direct observation method is adopted to evaluate the outcomes from the case studies by using the indicators to support the study are discussed in the table below.

Indicators	Process
Facade	To identify the elements of form i.e. the main form, additional built form, primary & secondary elements features.
Structural details, materials	To identify structural details by means of plans & sections, height of the building, special detailing, materials used
Setting	Location, approach to the site, context
Spatial Organization	Identifying- transition spaces, path for circulation, design approach

4. FINDINGS

Administrative Building, Yeola



Fig. No.1 front elevation of admin building Yeola

Located on the Manmad-Ahmednagar road, constructed in 2009. The site located is in the outskirts of Yeola. The area is about 17 acres with parking facilities, lush green landscape, amphitheatre, multipurpose hall. The building has ground & first floor in which ground floor consists of offices, chambers & first floor consists of meeting hall as shown in fig no. 6

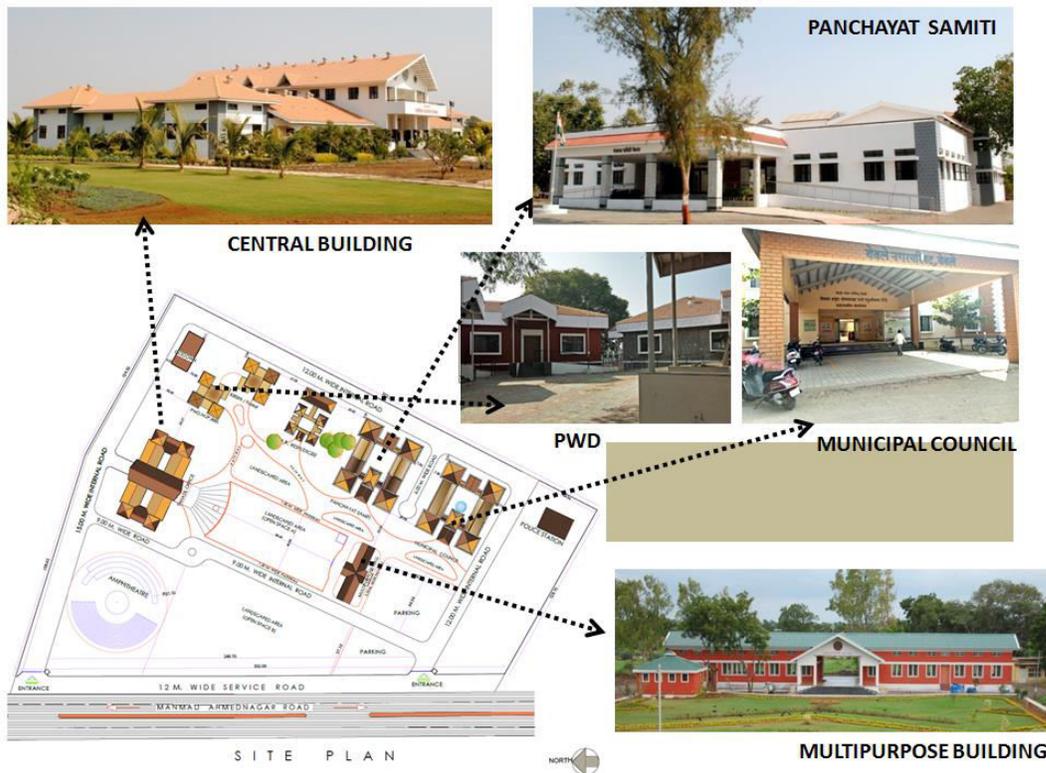
Site Plan Its Organization

Axial cum clustered organization relies on physical proximity to relate its spaces to one another.

Often consists of repetitive, cellular spaces carrying different functions & share a common visual trait such as shape or orientation.

It contains an amphitheatre, landscaping, pedestrian walkways extending into the green area.





4.1 Architectural analysis

- **Form- facade**

When describing the facade, the three most important part of the building; roof, body and base must be observed. The pitched roof acts as supporting architectural element to the building. The body of the building comes in uniformity. The central rose window decorated with stained glass. The design is carried through consistently in size and regularity& symmetry. The building is double height due to which it appears as grandeur in scale

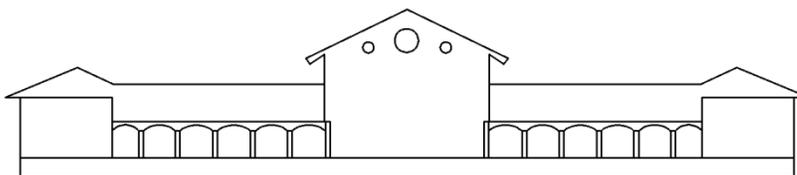


Fig. No.2 building elements on form

1. Form- structural and detailing

The construction technique used is RCC, having pitched roof, the roof is rested on the tubular truss, Bison panels are laid over & then the Mangalore tiles are placed over the panels, the windows are paneled windows

of aluminum & glass panels. The flooring used is custom made tiles having floral pattern which appears like carpet placed on the floor.



fig. No.3 tubular truss, Bison panels are laid

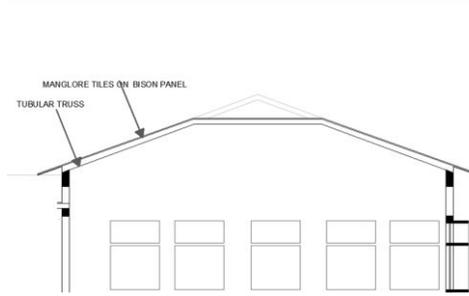


Fig. No.4 section of roof



Fig. No.5 floral pattern custom made tiles

▪ Plan & Its Organization

The plan is rectilinear in shape with the two courtyards connected by means of the corridors as shown in Fig. No.6. Double volume spaces in the building allow better air flow. This results to minimum usage of mechanical system and artificial lighting as the building is sufficiently lit during the day.



Fig. No.6



Fig. No.7 double height corridor



Fig. No.8 Courtyard surrounded by corridor

4.2 Architectural analysis

Baramati Nagarparishad Building

Located in the core area of the city, Baramati Nagarparishad building is located on Baramati-Bhigwan road. The area is about 2 Acres with parking facilities at the ground floor. The building consists of four floors & an entrance plaza.



Fig. No.9 Roadside view

1. Form- facade

Bauhaus architecture style is observed in terms of aesthetics & form of the building, i.e. Simplicity of lines and shapes, cubical in shape, four flat sides as well as flat roof tops. The color combination used is of the typical Bauhaus style that are black, white and grey.

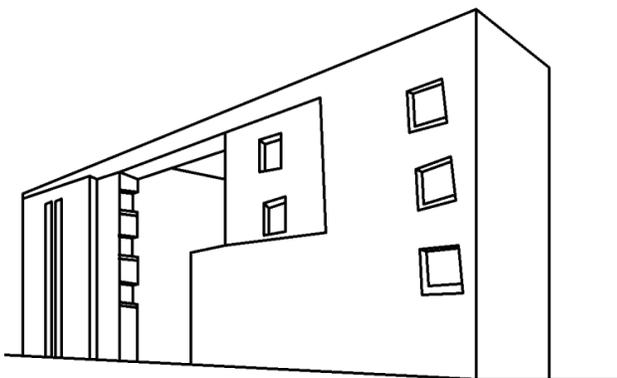


Fig. No.10 basic building elements on the form



Here are some **Key Elements of Bauhaus Architecture**

- Eschewing ornamentation to focus on simple, rational, functional design.
- A focus on simple geometric forms such as the triangle, square, and circle.
- Asymmetry favored over symmetry.
- Use of steel, glass, concrete, and other modern **materials**.
- **Flat roofs**.
- Glass curtain walls.
- Smooth facades.

▪ **Plan & Its Organization**

Compact planning, C shape planning with entrance plaza at the of the building. Parking on the ground floor, with the lift lobby at the center of building and staircase at the both ends. The offices are open plan type office.

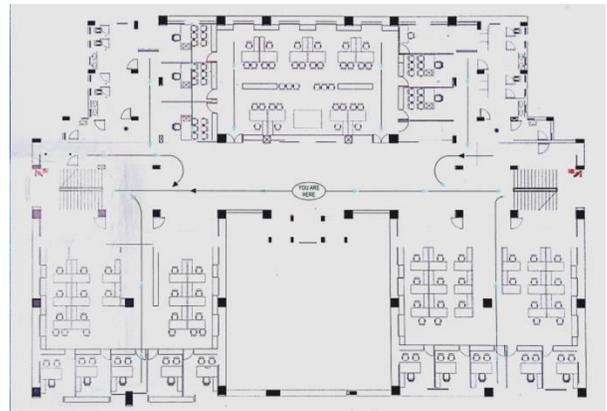


Fig. No.11 floor plan of the building

First Floor consists of Health Dept., Electric Dept, Store Dept, and Encroachment & Advertise Dept, Water Supply Jananisaran & Sanitation Dept, Fire Fighting Dept, Udyan Dept, Atikraman, Milkat & Bazaar Dept, Tax Dept, Accounts Dept, Construction Dept office areas. Second Floor consists of Nagaradhyaksha Cabin, Deputy Chief Cabin, Construction Dept. Chairman Cabin, Health Dept., Chief Officer, Deputy Chief Officer, Water Supply, Computer Dept., Town Planning Dept., Office Superintendent and Committee Hall. Third Floor consists of Auditorium, Waiting Room, Office, Sadasya Cabin, Speaker Cabin and VIP Room.



Fig. No.12 Lift lobby



Fig. No.13 Parking on the ground floor



Fig. No.14 open plan office area

▪ **Form- structural and detailing**

The construction technique used is RCC, having flat roof. The entrance is covered by translucent polycarbonate sheets placed over the truss. The windows are sliding windows of aluminum & glass panels. The flooring used is vitrified tiles inside the office spaces & granite in the corridors. Fire fighting system that is dry riser system is fitted through the building. The overall look of the building is modern & all modern type of interiors.



Fig. No.15 entrance of the building



Fig. No.16 granite tiles in the corridors



Fig. No.17 waiting area



Fig. No.18 interior of the office space

5.1 Observations & Comparative Analysis

Location	Yeola	Baramati	Inferences
Area	17acres	2acres	
Building typology	Government	Government	Government
Architectural Character	Geometrical minimalism, traditional	Geometrical, contemporary	Minimalistic
Built form	The building interconnected through courtyards	Compact building	built form can be generated through transition spaces
Spatial Organization	building clusters connected through pathways	Single building	to connect the links within the building blocks
Public Spaces	Landscape, Amphitheatre	Entrance Plaza act as place for interaction, gathering	main foci of for visual connection
Courtyard	act only for sake of ventilation & light	no courtyard	to generate activities in built mass
Parking	At the entrance	At the Ground Floor	surface parking should be preferred
Vehicular Movement	Allowed along the periphery	Restricted along the periphery	no vehicular movement in the public area

- In the first case study, i.e. Administrative Campus, Yeola all government buildings are grouped in one campus with public amenities, making it easier for the common man while in the second case study it one single building there are no such public amenities available for the public.
- **Location:** the Administrative Campus, Yeola is located in the outskirts of the town while the Baramati Nagarparishad Building is situated in the congested area of the town, hence facing lack of parking space, gathering spaces.

5.2 Conclusion

- In the gaothan area of the town, government office buildings are scattered around the town, the centralized model can greatly improve efficiency and convenience of access.
- Identities are lacking, as Administrative buildings carry typical functions, but the everywhere and iconic building image has predictably become monotonous and boring.
- Aiming to solve the current issues of administrative buildings in scale, public presence, and identity - the design should have inspirations from local/vernacular architecture and traditional spaces, and uses public spaces as the main foundation in the design concepts.
- In addition to the administrative functions and administrative services a variety of public services such as library, art gallery, theater, cafe, restaurant, etc, can effectively enhance the public presence and openness of space in the administrative campus.

6. References

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