The NIO Buildings

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It is in the fitness of things that an edifice of a national status for Research Laboratories on Oceanography has been rightly allotted one of the most prominent sites at Panjim, the capital of Goa.

The site is situated on the elevated Plateau of Dona Paula having a commanding view of the sea on the West and the Bay on the slopes towards the East. The site on the outskirts of Panjim at the junction of the roads leading to Dona Paula jetty and the Caboraj Road leading to Government House. Its location away from the high traffic roads and its quiet environment makes this site ideal for an Institute for research work.

The area of the site is 1,31,387 sq. metre.

Master Plan

In drawing up the Master Plan for this beautiful site, the main consideration was to use to advantage the topography which forms a high level plateau in the middle of the site gradually sloping towards the south and rather sharply towards the East.

Land utilisation is taken for three specific functions of the site namely, for the main Laboratory Building, for the Hostel for scientists and for the Senior Staff Colony. These have been so distributed as to locate the main laboratories on the highest point, leaving sufficient land for extension of the laboratory buildings and its allied activities.

The Hostel is placed on the extreme western corner, almost on the edge of the cliff and will be a land mark of the campus from the sea.

The Staff quarters have been laid out on the terraced slopes on the southern side, facing the sea, leaving ample space for additional quarters to be developed without hindering the south west aspect and view of the sea from the main laboratory buildings.

The Director’s residence is located on the road to Caboraj and the strip of land. West of this residence is earmarked for the future senior officers bungalows and other staff.

A strip of land behind the private property along Dona Paula jetty road has been reserved for services such as garages, maintenance office, sub-stations, pumping stations etc.
Finally the existing deep quarry on the Southern most extremity of the site is contemplated to develop into an open-air Aquarium for large ocean fish and other sea life.

The main Laboratory buildings complex is approached by a dual road, entry of which is from the junction of Dona Paula and Caboraj roads. The gradual slopes from the main building to the apex of the two roads will be laid out in terraced gardens to form a suitable foreground to the campus.

Buildings

The final plans of the various buildings have been drawn up, after inspecting the merits and demerits of various other institutions of this nature in Delhi, Bombay, Poona and Bangalore, and we feel that the present layout for the NIO combines and caters for all that is desired for a laboratory building with concentration on research.

The plan is such as it provides for various wings diverting from the Administrative block and allowing for horizontal extension in future. It comprises of departments of Administration, Chemistry, Biology, Data and Instrumentation, Geology, Physics, Library and finally the Canteen.

The Canteen is semi-detached, and approached by covered corridors, it has a kitchen and preparation in the semi basement with food lifts to service above. The main dining floor is contilevered over the kitchen and will have a clear vista of the surrounding sea.

The Library building which will contain the reading rooms and reference stacke rooms, is very centrally situated near the entrance and is accessible by all departments. It will have a basement for its separate air-conditioning, book-binding and other activities.

A central courtyard has been designed as a garden feature immediately behind the entrance hall and will be overlooked by all the departments located in this building.

All equipment for services for Laboratories like distilled water plant, air-conditioning etc will be housed in a basement, workshops are semi-detached and conveniently placed.

Construction

The first phase now under construction, comprises the entrance hall, Biology, Director’s office, Chemistry, Library, workshops and canteen all of which have a plinth area of about 6,300 sq. m. The estimated cost for the first phase which includes site development, street lighting, sewerage and water supply is about 40 lakhs.

The second phase will comprise of the Physics, Data & Instrumentation and the Geology block and it is proposed to take this in hand immediately on completion of the first phase, as a continued job. The plinth area for this phase would be
about 2,200 sq. m. and the estimated cost including services and site development would be about Rs. 15 lakhs.

In the future phase will be taken the construction of an Auditorium, Museum, Aquarium and Conference Hall etc., of an area of 1,500 sq. m. and an estimated cost of Rs. 6 lakhs.

**Local Character**

The Architectural character, it was felt should naturally be "contemporary" dictated by its functional plan and layout but with a certain amount of retention of the local character which will be maintained, and this is hoped to be achieved in the entrance facade and colonade the details of which will have typical Goan motifs now seen in the public and domestic architecture in Goa.

Another special feature characterizing the building is the series of decks for observations, in the form of a tower. This tower will be crowned with a beacon and will serve as a landmark for ocean going ships and air-craft.

When completed in all its phases and developed with rich gardens, this Institution would be one of the most important and efficient campuses that will go to further enhance the development of this region.