

I.2: Construction of civil infrastructure

Construction of twenty-four numbers of type III C houses in the Nilgiri Tower, a multistoried (stilt + 6 storey) building, as shown in Figure I.2.1, is completed. With this, the total number of houses in the RRCAT colony now stands at 1054. The stilt area of the multi storey has a designated two wheeler parking facility for the occupants. Facility for parking of 4 wheeler vehicles in its close vicinity is also provided.



Fig. 1.2.1: Photograph of the multistoried type III C Nilgiri Tower.

Revolving dome for observatory building, as shown in Figure I.2.2, is commissioned.



Fig. I.2.2: A view of the observatory building.

The main entrance and exit gates of RRCAT premises are completed. Figure I.2.3 shows the photograph of the newly constructed entrance gate of RRCAT premises. The area has been illuminated with high-bay luminaire of average 500 lux.

Extension of BSNL telephone exchange near the main gate is also completed. A number of boards displaying directions to various areas are installed in the colony area. Open air gymnasium has been set-up in the lake-side garden. About 1940 trees have been planted to further enhance the greenery of the campus.



Fig. I.2.3: Photograph of main gate of RRCAT premises.

Construction of a building for testing of Super Conducting Radio Frequency (SCRF) cavities in Horizontal Test Stand (HTS) has been completed. It is an extension of existing building used for Vertical Test Stand (VTS) measurements. This has permitted use of existing services including overhead crane for both types of measurements. Radiation shielded vault inside HTS lab has been constructed in mission mode using heavy Reinforced Cement Concrete (RCC) precast concrete blocks for walls and slabs of complex geometry for effective interlocking. The completion of vault ensured timely accomplishment of laying of all supporting facilities and installation of cryostat with required precision. The configuration of RCC columns and beams have been selected such that the mechanical strength of ceiling block is also utilized in addition to its primary purpose of radiation shielding. Figure I.2.4 shows a view of the shielding vault for the HTS.



Fig. I.2.4: A view of the shielding vault for Horizontal Test Stand (HTS)

Reported by: G. Parchani (parchani@rrcat.gov.in)

RRCAT NEWSLETTER Vol. 32 Issue 2, 2019