The Aga Khan Award for Architecture

CLIENT'S RECORD **CONFIDENTIAL**

I. IDENTIFICATION

Project Title: Central Institute of Educational Technology
National Council of Educational Research & Training

Street Address: Sri Aurobindo Marg

City: New Delhi Postal Code: 110016 Country: INDIA

Telephone: 660479
6864801(10 lines) Facsimile: NIL Telex:

II. PERSONS RESPONSIBLE

A. Architect/Planner

Name: Mr.Raj Rewal and M/s Raj Rewal Associates

Mailing Address: E-12, Defence Colony

City: New Delhi Postal Code: 110 024 Country: INDIA

Telephone: 611495 & 625428 Facsimile: Telex:

B. Client

Name: Central Institute of Educational Technology
National Council of Educational Research & Training

Mailing Address: Sri Aurobindo Marg

City: New Delhi Postal Code: 110 016 Country: INDIA

Telephone: 660479
666047(16 lines) Facsimile: Telex: 31-73024-NCERT-IN

C. Consultants (e.g. Engineers, Economists, Sociologists, Historians, etc.) - within CIET

Name: 1. Mr.V.B.Pradhan(System Engineering)
2. Prof. S.P. Singh
Head, Technical Planning, Operation & Maintenance Division of CIET

Mailing Address: National Council of Educational Research and Training

City: New Delhi Postal Code: 110 016 Country: INDIA

Telephone: 6864801 Facsimile: - Telex: 31-73024-NCERT-IN

D. Master Craftsman/Contractor for Building works *

Name: Ahluwalia Contracts (I) Pvt. Ltd.

Mailing Address: B-4/205, Safdarjung Enclave

City: New Delhi Postal Code: 110 029 Country: INDIA

*Work supervised by the Construction Division of
Department of Space, Govt. of India, Bangalore.

Please cite other project affiliates overleaf

Central Institute of Educational Technology, New Delhi, India

III. USE

A. Specify type(s) of use: a) Production of audio-video Programme primarily for children and teacher education *

B. User(s) or Occupant(s): (1) Academicians (2) Professional: Production staff (3) Engineers

1. Occupation/Profession: _____

2. Income Level (check one): – High – Medium – Low – Mixed

C. Specify any change(s) between planned and actual use: Nil

*(b) Research, Training and Consultancy services in Educational Technology

(c) Library Resources : Film, audio/video, books

IV. PROJECT TIMETABLE

(Please specify year and month)

A. Design: Commencement 26th May 1986 Completion 14th July 1986

B. Construction: Commencement 14th August 1986 Completion 28th February 1989

C. Date of Project Occupancy 31st July 1989

V. PROJECT ECONOMICS

(Please specify amount, currency and date of transaction)

	Amount	Currency	Date
A. Total Initial Budget	~~Rs.33,700000.00~~	Indian Rupees (1 US$ = Rs.20.00 as on 1.6.91)	1985 approx.
B. Cost of Land	Nil (GOVT. PROPERTY)		
C. Analysis of Actual Costs			
1. Infrastructure (Project management & supervision)	2,610100.00	Rupees	1985-1990
2. Labour	~~100,390.00~~ @	Rupees	1986-1989
3. Materials	30,117000.00 @	Rupees	"
4. Landscaping	~~(included in 2 & 3)~~		–
5. Professional Fees	1,011700.00		"
6. Other	@	Civil & PH - 29,000000.00 ~~Electrical - 4,226000.00~~ A.C. - 5,220000.00 Acoustics - 1,710000.00	
D. Total Actual Costs (without land)	43,827,100.00		
E. Actual Cost per sq.m.	Rs.4,112/- -per sq.m.		
F. Cost Comparison	Rs.3,117/- per sq.m.(for civil and electrical alone)		

Please indicate how the costs of this project relate to typical building costs in the country (check one):

✓ Average Nil Above Average Nil Below Average

G. Sources of Funds

1. Please indicate the percentage of funds that came from:

X Private Sources All from Public Sources

2. If funding was public, what percentage was from:

– Local Sources – National Sources ✓ International Sources

Please continue overleaf

VI. CONSTRUCTION DETAILS

A. Site and Building Area (please indicate in square metres)

1. Total Site Area ..... 94.05x69.3 = 6,517.66 sq.m.
2. Total Ground Floor Area ..... 3,425 sq.m.
3. Total Combined Floor Area ..... 10,666 sq.m.
   (including basement(s), ground floor(s) and all upper floors)

B. Construction and Technology

Describe the structural system and the basic method of construction. For restoration projects, please describe the techniques used in the conservation of the original structure. Framed structure with RCC coulms of size 450 mm dia connected with R.C.C. beams at plinth level and at each floor levels. Roof slab at each floor level. This is a completely new structure built on a fairly even piece of land. This building is divided in four blocks during execution for better project management. Columns are fair finished with steel moulds and all coffers are casted in fibre glass moulds, one such mould was repeated at least 50 times and over 8200 coffers were casted. Studio block was separately built and connected with the main block over R.C.C. brackets with the help of Neoprene bearings for noise isolation. Brick work is only used for partition walls. External face is completely cladded with red sand stone.

C. Description of Materials
(please also indicate if locally produced or imported and whether fabricated on-site or elsewhere)

1. Foundations
   Column footings with plinth beam connection.

2. Principal Structural Members
   Columns, beams, waffled slabs(made of R.C.C.)

3. Infill Brick work
   i) 230mm walls for external faces
   ii) 115mm walls for partition walls

4. Rendering of Facades or Exterior Finishes Rough dressed
   i) Red sandstone cladding
   ii) White sandstone band allround on RCC beams

5. Floors
   1. Cast-in-situ flooring in rooms
   2. Kotah stone floor in reception flyover area, kitchen and a few toilets.
   3. Pre-cast terrazo tile flooring in corridors.
   4. Main TV Studios - Linolium flooring.
   5. PVC vinyl flooring in other technical areas

6. Ceilings
   False ceiling with Plaster of Paris, wood wool boards etc.

7. Roofing
   Pre-cast waffled slabs(casted at site)

8. Other elements (please specify)
   Water proofing by Acrylic brick coba water proofing.

D. Type of Labour Force (please indicate percentage)

35% Skilled Workers ..... 65% Unskilled Workers

E. Origin of Labour Force

India Domestic ..... x ..... Foreign

VII. GENERAL GEOGRAPHY AND CLIMATE

Please describe the local climatic and geographic characteristics and the extent to which these have been taken into consideration in the design process.

The CIET building is located in the NCERT campus which is spread in sixty-four acres, in South Delhi near the historic Qutab Minar. The terrain is rocky. The climate is extreme. The monsoon rain is about 60 cm per year during the months of July, August, September and occasional winter rain. During summer there are dusty winds from the neighbouring desert.

VIII. EVOLUTION OF DESIGN CONCEPTS

Please describe the history of the project, from its conception to its final construction and actual use.

In 1984, the Central Institute of Educational Technology(CIET) was set up as a constituent unit of the National Council of Educational Research and Training(NCERT).

The CIET has the mandate to promote the use of educational technology particularly mass media in the improvement and spread of education in the country. The main functions are to:

- produce programme materials on audio, video and film relevant to the childrenn in age groups 5 to 11.
- Programmes for teacher education
- Programmes for children with special needs.
- Train personnel in the field of educational technology
- Conduct research and evaluate educational systems
- Document and disseminate information on educational media and technology
- Coordinate production activities of the State Institutes of Educational Technologies(SIETs).

In 1985 the CIET was set up in a temporary studio by converting an available building. The various divisions of the Institute were housed in buildings located in different parts of the city. In the 6th Five-Year Plan (1980--85) there wasa greater thrust to education through the use of media. The Govt. of India approved the scheme 'INSAT for Education' by using the Indian Satellite for educational purposes.

The present building formed part of the whole project of using the educational technology for the benefit of children of India. On 6th February, 1991, the building was dedicated to the children of India by the Prime Minister of India. The building has been named, 'Chacha Nehru Bhawan' after the first Prime Minister, Pandit Jawahar Lal Nehru, who loved children and was affectionately called Chacha (Uncle).

The requirements of the educational tecnology centre were projected by CIET to the Architect. A four floor building was proposed to be constructed. Sound and television studios are located on the ground floor with ancillary facilities, rehearsal rooms, sales and display areas. The first floor was designed for production control and technical rooms both for electronic production and for film and photographic work. The second floor was designed for academic acztivities with library facilities, discussion, lecture, conference rooms and office space for academic staff. The third floor office space is for administration and accounts. The inner courtyard could be used for exhibitions and open air theatre. Based on these

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activities, the movement and circulation of persons within the building was planned. A canteen for catering to 300 staff has also been planned. The entire planning by the architect was related to the system design proposed by CIET. There has been no modifications during final construction and actual use. The project has come up without any serious obstacles in the given period. There was close coordination between various experts of the CIET and the architect for structural engineering, electrical engineering, sanitary engineering, air-conditioning and acoustics.

IX. PROJECT SIGNIFICANCE AND IMPACT

In what way is this project important ? Please describe the aspects of the project which represent a particular achievement (for example the technical, economic, or social achievement, or its response to culture, climate, etc.).

The Central Institute of Educational Technology is a centre of excellence and is a prestigious institute in the country. Inspired in design by the Mughal architecture of Fatehpur Sikri and screened balconies of Jaisalmer with multiple level of terraces and shaded alcoves with an inner courtyard in the traditional 'Madarsa' character, the building provides an experienceof space, shaded alcoves of serenity. For, pattern and live play in the ever changing light, creating its own rhythms space and functions are well articulated and interlinked.

The red sand stone faced building, with plenty of windows and corridor, space, permits people to view the historic Qutab Minar and flowering tree tops. The wide corridors keep the rooms cool in the summer and in winter encourage people to meet in sunlit corridors, facilitating informal interaction, so necessary for persons involved in communication.

The Chacha Nehru Bhawan is a beautiful building easy to maintain and comfortable to work in the extreme temperatures. It is indeed a remarkable achievement to construct the building at so reasonable a cost and in so short a time.

A brochure on the CIET is attached.

Please continue overleaf

X. PRESENTATION REQUIREMENTS

A. The materials described below are the minimum requirements for project presentation. These materials will be used in the preparation of standardised presentations to be constituted by the Award office and reviewed by the Master Jury. Subsequently, they will form part of the permanent Award archives and may be made available for public consultation.

The submission materials should be clearly identified and should not be bound or mounted. For slides and photographs, a list of captions should be provided for each image; the name(s) of photographer(s) and date(s) of photography should also be specified.

1. Map indicating location of project in city, community, neighbourhood, or landscape.
2. Ten (10) photographs; preferred and maximum size for A4 presentation (18 x 24 centimetres).
3. Twenty (20) slides; 24 x 36 millimetres.

Enclosed

4. Drawings; preferred and maximum size for A3 format presentation (29,7 x 42 centimetres).
   Site, Roof, and Massing Plans;
   Floor Plan(s);
   Elevations;
   Sections.
5. Curriculum Vitae, or Firm's Prospectus.

B. The submission of additional materials is encouraged. Please specify any appended materials not listed above.

NIL

C. Please indicate other sources of information on the project(s), e.g. publications, personal contacts, etc.

NIL

Please note: The submission of this Record is a prerequisite to candidacy for the Award. All information contained in and submitted with the Record will be kept strictly confidential until announcement of the Award is made. Subsequently, such material may be made available by the Aga Khan Award for Architecture and you hereby grant the Aga Khan Award for Architecture a non-exclusive licence for the duration of the legal term of copyright (and all rights in the nature of copyright) in the Material submitted to reproduce the Material or licence the reproduction of the same throughout the world.

Signature Jai Chandiram.

Name (please print) JAI CHANDIRAM Date 10th June 1991

All materials should be forwarded to:

The Aga Khan Award for Architecture
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Geneva, Switzerland

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