The Aga Khan Award for Architecture

1998 ARCHITECT'S RECORD

1453.PAK

I. IDENTIFICATION

Project Title: Conservation of Choona Mandi Haveli (Haveli Dhyan Singh)

Street Address: Choona Mandi Bazaar, Inside Masti Gate,

City: Lahore Postal Code: - Country: Pakistan

II. PERSONS RESPONSIBLE

A. Architect/Planner

Name: Pakistan Environmental Planning & Architectural Consultants (Private) Limited (PEPAC)

Mailing Address: 58-Abu Bakar Block, New Garden Town

City: Lahore Postal Code: 54600 Country: Pakistan

Telephone: 5868741, 43, 45 Facsimile: 5868742 Telex: -

B. Client

Name: Lahore Development Authority (LDA)

Mailing Address: LDA Complex, Court Street

City: Lahore Postal Code: - Country: Pakistan

Telephone: 7229661 Facsimile: 7238279 Telex:

C. Project Affiliates

Please list those involved in the project and indicate their rôles and areas of responsibility (e.g. engineers, contractors, economists, master craftsmen, other architects, clients, etc.).

Name	Rôle
CONSULTANTS	
Syed Muhammad Irfan	Project Manager
Masood A. Khan	Principal Architect
Zaigham Mahmood	Architect
Sohail A. Khan	Architect
G.M. Baloch	Structural Engineer
CLIENT:	
Sheikh Abdul Rashid	Director General LDA
Capt. (Retd.) Mushtaq Ahmed	Director Engineering LDA

Please cite addresses, telephone numbers and other project affiliates separately.

P.T.O.

Conservation of Choona Mandi Haveli, Lahore, Pakistan

M. Aslam Kharal	Engineer LDA
Muhammad Ehsan	Sub Engineer LDA

CONTRACTORS:

M/s. Babar Electric Company	General Contractor
Mian M. Jahangir	Partner - BEC
Maj. (Retd.) M.A. Chughtai	Project Engineer - BEC
M. Younas Butt	Masonry Sub-Contractor
M. Farooq	Plaster/Fresco Sub-Contractor
M. Inayat	Wood craftsman

Address Contractor:

Babar Electric Company,
House No. 67, Street No. 2,
Officers Colony,
Cavalry Ground,
Lahore Cantt.

Tel Off: 380936.

III. ARCHITECT'S BRIEF

Please describe the initial project programme.

The historic building by the name of Haveli Dhyan Singh located within a complex of govt. and privately owned havelis (palatial houses) in Choona Mandi Bazaar was in use of the Central Investigation Agency (CIA) of the Punjab Police Department. In June 1986 it was handed over to the Education Department to be converted into a girls' college with following facilities:

> Class Rooms to accommodate degree classes, Science Laboratories, Library, Multipurpose Hall for 350 persons, Admin. Offices, Staff Rooms, Common Rooms, Prayer Hall, Principal's residence and open grounds.

Initially the work started with demolition of deteriorated structures, replacement of historic timber roofs and modern day interventions to convert existing rooms for college use.

PEPAC, who were already involved in preparation of an area conservation plan for the historic Walled City of Lahore, evaluated the historic haveli and put forward proposals for conserving the haveli and its adaptation for re-use as a grils' college.

PEPAC's proposal for conservation and re-use was accepted, the demolition was halted and a new brief was approved which comprised the following:

- Conservation and re-use of existing structures adapting for the needs of a girls' college.
- Reconstruction of new blocks and facilities to meet the college requirements.
- Structural consolidation of dilapidated buildings.
- Steps to counter the effects of already carried out interventions.
- Removal of private dwellers from within the complex.

IV. EVOLUTION OF DESIGN CONCEPTS

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

After the Government's decision to relocate the Police Department and vacate the historic haveli, the Education Department started to demolish the historic structures to make way for a new college building as has been done in some other parts of the Walled City. However when the decision was taken to preserve the historic haveli, the project to establish a girls' college within the Walled City was taken from the Education Department and handed over to Lahore Development Authority (LDA) who were already involved in upgrading of services in the Walled City area under a separate program. PEPAC were hired as consultants by LDA in 1988 to plan the re-use of the building as a girls' college and also to bring back its formal glory.

What PEPAC, as consultants, encountered was an already approved grossly inadequate budget, partly demolished partly falling apart historic building in urgent need of repairs. A survey of the whole complex was carried out and the building evaluated with reference to its historicity, conservation and re-use potential. It turned out that the whole complex was originally built around 1820s by Jamadar Khushal Singh, a chamberlain in the court of Maharaja Ranjeet Singh (1799-1839). Three havelis and numerous later day dwellings existed on the site. The largest haveli originally belonged to Khushal Singh, which was converted into CIA Centre in early 1950s, and was vacated in 1986 to make way for the construction of girls' college. The second haveli belonged to Raja Teja Singh, adopted son of Khushal Singh and was occupied by a private family. The third haveli whose origns could not be traced was under CIA's control. In addition about 110 families were squatting on the site in various make shift dwellings.

PEPAC prepared a master plan for the whole site, and detailed proposals were prepared for preservation, restoration and reconstruction of the Khushal Singh's Haveli to be used as a girls' college. Relocation of private dwellers and creation of an enclosed park for ladies of the area was added to the original brief on popular demand. The original budgets were revised to meet the extra costs required for restoration work.

Relocation costs were met by the LDA through its development schemes. Restoration of the other two havelis was planned for subsequent phases of development.

Final project comprised structural consolidation of existing buildings, restoration of partially demolished structures and reconstruction of new blocks to meet the functional requirements and to complete the enclosure around the historic courtyard. Necessary modifications in the form of electrical and mechanical services were made to make the building function for college use. Original roman style baths were restored with glass viewing cover and the lower floor of the entrance gateway was meant for a small tourism/conservation related unit.

The college started functioning in the building in January 1994. Parts of the building remain incomplete due to lack of funds. Later phases regarding development of the two havelis are still under consideration. Enclosed garden has been completed and made open to the women folk of the area.

V. CONSTRUCTION DETAILS

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

1. Foundations
Thick brick masonry foundations laid in lime and/or mud mortar, without spread out footings.

2. Principal Structural Members
Brick walls - outside leaf in fine brick work laid in lime and/or mud mortar, inside core filled with brick bats and mud. Fine brick work columns laid in lime mortar supporting arches above at verandahs.

3. Infill
Later additions of brick work and wooden doors/windows in arched openings, and in rooms to make alterations.

4. Rendering of Façades or Exterior Finishes
Exposed brick work pointed in lime mortar. Lime plaster finished with glazed lime putty. Painted line work on plaster surfaces.

5. Floors
Brick tiles laid in lime mortar.
Lime screed laid over base and sub base.
Marble flooring.

6. Ceilings
Timber board ceilings.
Exposed timber joists and purlines.

7. Roofing
Timber joists resting on heavy timber beams, covered with wooden planks to receive packed earth and finished with lime screed to make it water resistant.

8. Other elements (please specify)
Stucco mouldings and carved brick work at column bases and tamples, and underneath canopies Frescoe paintings to decorate lime plastered walls. Timber doors and windows.

B. Construction Technology
Indicate the basic construction technology, methods, details or systems.
The present haveli was built in early 19th century, presumably at the site of an earlier haveli using some of its layout and foundations. The construction techniques are essentially traditional using small kiln-fired bricks, mud mortar, lime plaster and timber lintels at openings. Roofing is either timber beams laid next to each other, or at distances with smaller joi ts spanning in between and covered with timber planks. Relieving arches and timber wall flats have also been used. Elaborate water cisterns, channels and vertical chutes have been used in baths at confined locations.

C. Type of Labour Force (please indicate percentage) 60% Skilled Workers 40% Unskilled Workers

D. Origin of Labour Force 100% Domestic _____ Foreign

VI. TIMETABLE

(please specify year and month)

A. Commission: February 1988

B. Design: Commencement: April 1989 Completion: October 1990

C. Construction: Commencement: June 1991 Completion: January 1994

D. Date of Project Occupancy: January 1994

VII. AREAS AND SURFACES

Site and Building Area (please indicate in square metres)

1. Total Site Area: 3.28 Hectares
2. Total Ground Floor Area: 5280 Sq. metres
3. Total Combined Floor Area: 6890 Sq. metres
   (including basement(s), ground floor(s) and all upper floors)

VIII. ECONOMICS

Please specify the amounts in local currency. Provide the equivalent in US dollars. Specify the date and the rate of exchange for US dollars at that time.

	Amount in Local Currency	Amount in US dollars	Exchange Rate	Date
A. Total Initial Budget	Rs. 16.36 m	0.013 m	Rs. 22.28/US $	Jan 1991
B. Cost of Land	Rs. 46.00 m	1.472 m	31.25	July 1994
C. Analysis of Actual Costs				
1. Infrastructure	Rs. 1.50 m	0.05 m	30.44	Jan 1994
2. Labour	Rs. 12.98 m	0.426 m	30.44	Jan 1994
3. Materials	Rs. 41.43 m	1.361 m	30.44	Jan 1994
4. Landscaping	Rs. 5.00 m	0.016 m	30.44	Jan 1994
5. Professional Fees	Rs. 2.00 m	0.006 m	30.44	Jan 1994
6. Other	-	-	-	-
D. Total Actual Costs (without land)	Rs. 62.91 m	2.013 m	31.25	July 1994
E. Actual Cost per sq.m.	Rs. 9131	292	31.25	July 1994

F. Cost Comparison

Please indicate how the costs of this project relate to typical building costs in the country:

_____ Average ✓ Above Average _____ Below Average

G. Sources of Funds

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

_____ Private Sources 100% Public Sources

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

50% Local Sources 50% National Sources _____ International Sources

IX. PROJECT SIGNIFICANCE AND IMPACT

In what way is this project important ?

a) The haveli is the largest extant example of havelis (palatial houses) outside of the Lahore Fort in the historic Walled City of Lahore. It has an enclosed courtyard which is the largest remaining in the area. The layout of the haveli, and other characteristics of large private houses are preserved shedding light on now extinct living patterns and domestic architecture of nineteenth and earlier centuries.

b) The previous practice of demolition of old government owned buildings to make way for new facilities have been given a new direction by which historic buildings can be recycled and put to modern use achieving cultural benefits as well.

c) The city centre has been rejuvenated through.

   i) imrpvement in educational facilities by providing the first college for women in the Walled City.

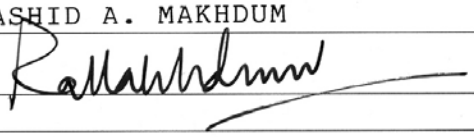
   ii) Social benefits to the women of the Walled City who have a tendency to remain within their vicinity.

   iii) Upgrading of services for the residents including improvement of physical environment, provision of an enclosed garden for women and children, and relocation of squatters with due compensation.

   iv) Important social and cultural benefits will contribute to the rising of civic consciousness and an improved sense of well-being among the citizenry.

d) Economic benefits have been achieved through creating venue for holding social functions for the corporate sector. Moreover spin-off effects in the form of technical know-how of traditional building crafts, production of traditional building materials for use in new construction etc. have resulted in additional non-quantifiable economic benefits.

Name (please print) RASHID A. MAKHDUM

Signature  Date 05-01-1998