Restoration and Adaptive Reuse of the Railway Saloon Building Baroda City Heritage Museum



Submitted by Heritage Trust Baroda



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A Feasibility Report

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Introduction

Heritage Trust over the years has examined the Saloon Shed building in detail from both the technical and cultural aspects. Its length, breadth, height, placements of doors and windows and other architectural details have been mapped, drawn and drafted. The Trust has found that the building is a strong structure and has not suffered much in terms of disintegration either structurally or visually. Its length and height is also such that it can be ideally adapted to a "Display" design that a Museum demands. It is a heritage building, symbolic of the progressive Gaekwadi era that the modern city of Baroda owes much to. At a micro level, it is actually representative of modern transportation systems coming to Baroda in the very early years of rail transportation in the form of the BC&CI lines.

The Saloon Shed is presently lying unused and is not looked after. It is already an internationally proven and accepted premise that all built structures, heritage or otherwise, continue to survive well if only routine maintenance is put in place on a regular basis. This comes easily and at no additional cost, if the building is being actually used. If the City Museum is housed in this structure, the building will be taken care of automatically. All over the world not only in metros and important cities, but even in small towns and villages, such minor heritage buildings have been adapted into various centres of cultural activities as a multi-pronged strategy of

- looking after them and thus preserving them as local heritage and historicity;
- of self-finance through entry fees and other recurring programs;
- of saving public money as well as the environment by not building new structures for the same purpose; and
- by attracting tourists and visitors.

The Saloon Shed is located in a part of Baroda that is easily accessible from every corner of the city. It is especially close to the Bus Depot and the Railway Station. More importantly, it is situated in an area that has no cultural activity at all and the 'introduction' of an element like the City Museum here would help fill this vacuum. At the same time, it is less than 3 kms from the Baroda Museum & Picture Gallery, making it quite convenient for visitors if they want to take in both in the course of a morning or afternoon. It is also in the neighbourhood of the M S University.

Heritage Trust is of the strong opinion that we must work with what we have. An ideal situation, of course, would be to design and build a City Heritage Museum in the heart of the city.

The Saloon Shed as the City Museum offers a positive, implementable, path-breaking, economical and most suitable answer in the present circumstances.

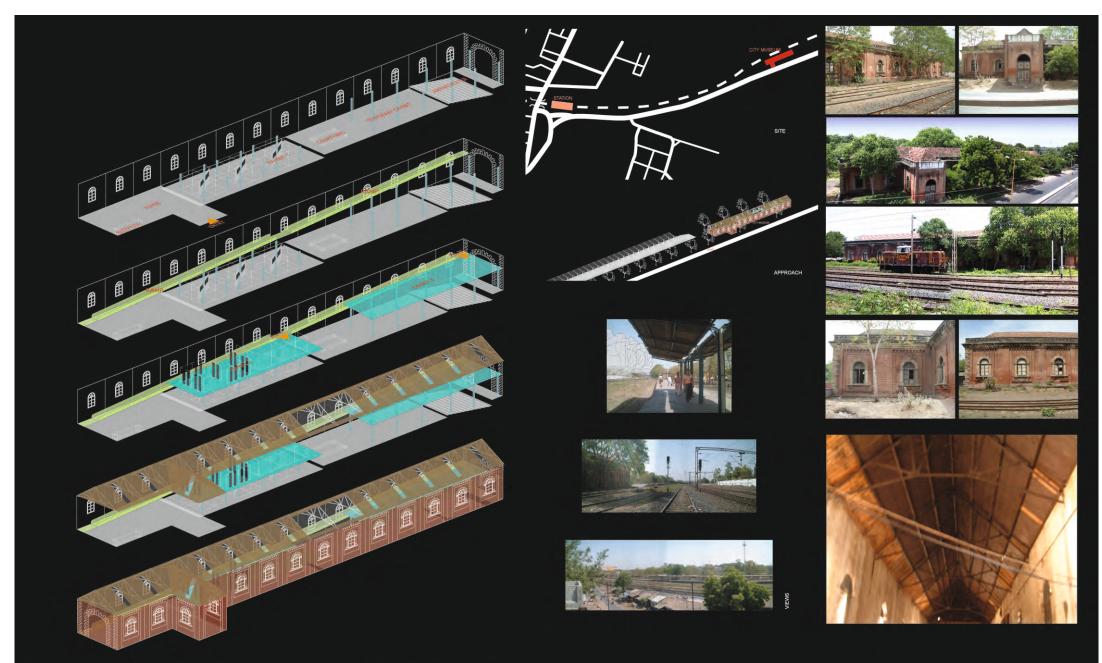
THE MUSEUM WILL DISPLAY PANELS TO SHOW THE GROWTH OF BARODA OVER THE PAST 1,800 YEARS; THE 87 LISTED HERITAGE BUILDINGS OF BARODA; AND IMAGES OF THE CITY TAKEN 100 YEARS AGO BY AN ENGLISH TRAVELLER IN TWO GALLERIES.

IT WILL ALSO HOUSE PRIVATE COLLECTIONS OF RESIDENTS OF BARODA IN ONE PERMANENT EXHIBITION GALLERY.

ONE GALLERY WILL HOUSE ROTATING TEMPORARY EXHIBITIONS



CITY HERITAGE MUSEUM



CITY HERITAGE MUSEUM

History of the Railways in Baroda State

Source: http://www.historyofvadodara.in/2010/01/Railway-Museum-and-Auditorium.html

Baroda State was involved in planning for railways since 1860, when first letter was written on 23rd March 1860 to lay a line connecting Dabhoi with Broad Gauge network. It constructed and owned first Narrow Gauge line of India in 1862 and by turn of the century had all the gauges Narrow Gauge, Meter Gauge and Broad Gauge. However, operation and maintenance was with BB&CI and other railways.

On 1st October 1921 Gaekwad Baroda State Railway (GBSR) took over operation and maintenance of Narrow Gauge system. By this time Baroda State had 557.32 miles of Railway network out of which, 267.83 miles was Narrow Gauge, 208.07 miles was Meter Gauge and 21.42 miles was Broad Gauge. More NG lines were constructed and by July 1922, 378.97 miles of open lines, which included 341.95 miles of Narrow Gauge and 37.02 miles of Meter Gauge of Okhamandal came under direct purview of GBSR. By 1923 Okhamandal system was handed over for operation and maintenance to Jamnagar Railway. By 1940 Baroda State owned 723 miles (excluding sidings), out of which, 663.96 miles was run by GBSR. it included 355.73 miles of Narrow Gauge and 308.23 miles Meter Gauge. (Gaekwar's Mehsana, Khajadia-Dhari and Prachi-Road Kodinar) Construction of State Railway office commenced in November 1920 with estimated cost of Rs 1,80,796 and was ready for occupation in 10 months.

Similarly, construction of Railway Store and Loco Offices was started during early 1921 and was finished before end of the year.

• GBSR - A Story of Financial Miracles

During the last 6 months of BB&CI administration (up to Sept 1921), Dabhoi lines showed a loss of Rs 6,421 (Gross earnings - RS 4,72,383 and working expenses - Rs 4,78,804) and overall Narrow Gauge suffered a loss of Rs 4,802. Within 6 months of taking over (from 1" October 1921 by GBSR) Dabhoi lines jumped to a profit of Rs 91,557 (Gross earnings — Rs 5,34,470, working expenses - Rs 4,22,913) and overall Narrow Gauge system got a profit of Rs 1,59,875.

During 1940, Net earnings of NG System was Rs 8.28 lakhs (Gross earnings - Rs 25.02 lakhs, working expenses - Rs 16.74 lakhs) with working percentage of 66.91%. For Meter Gauge system, net earnings were Rs 9.54 lakhs and working percentage of railway was 60.12%. By 1925, average speeds of trains had improved, new stations opened and additional trains were running. Expenditure was curtailed both on wages and maintenance.

• Beginning of BB&CI - 1855

Bombay, Baroda and Central India (BB&CI) railway comapany was incorporated by an Act of Parliament in July 1855 & it entered into an agreement with East India company in November 1855 for Railway construction. Initial Plans were to connect Bombay with Delhi or Agra by constructing a line via Surat and Baroda linking with EIR. Sanction was however given for line upto Ahmadabad, to ensure that cotton growing districts of Gujarat are linked with Bombay. As first part Surat and Baroda was to be Linked and line to be extended to Ahmadabad. Sanction for linking Bombay came in 1858.

Cutting of first sod took place in May 1856 and first section was opened in February 1860 between Utaran and Ankleshwar. Bridges specially 'Taptee' & 'Nerbudaa' were great challenges. Herculan efforts of J.P. Kennedy ensured it and railway reched Bombay (Grant Road Terminus) in 1864 and Bombay-Ahemdabad was connected in 1865.

• Arrival of Train in Baroda - 1861

After Narmada was bridged an Bharuch was reached, it was a short distance to Baroda. BB&CI linked Baroda on 9th January 1861 when first train reached Goya Gate amidst great fanfare.

It was seat of Gaekwads, who were one of the few States honoured with 21 Gun Salutes. It was one of the Largest & wealthiest princely state of British India, with wealth consuming from lucrative cotton business as well as rice, wheat and sugar. Baroda State covering over 8000 sq. miles was subdivided into four prant (State), namely Kadi, Baroda, Navsari and Amreli, Okhamandal region near Dwarka and Kodinar near Diu. Baroda State was founded in 1721, when Maratha General Pilajirao Gaekwad conquered Songadh.

Maharaja Ganpat Rao Gaekwad (1847-1856) granted land and permission to BB&CI to construct Railway in his territory. Realizing the importance of Railways, Baroda was the First Princely State to pioneer railway network to its own when it started Narrow Gauge Network.

• Beginning of Narrow Gauge - 1862

Dabhoi, a historical city known for architectural splendor of its Gates was also one of the most flourishing trading center during 19th Century. Trade was mostly Carried out in cotton, grain and mahaua seeds. It was also known for weaving along with metal work and wood carving. With rail connections so close Gaekwads decided to make a rail link of their own connecting Dabhoi with Baroda-Bombay line. First proposal mooted was for a connection from Etola, a station located very close to Baroda. Later on plan was changed to linking it to Baroda, however finally it was decided to link to Miagam, a station close to Bharuch with Dabhoi. In 1855, a survey was already made by BB&CI of linking Miagam with Dabhoi as a part of survey of linking Indore with Bombay.





narrow gauge line of gauge of 2 feet 6 inched with 13 lbs rail was made to connect Dabhoi with Miagam, a distance of 20 miles. Rails turned out to be too light for steam engines and bullocks were used for hauling train. It was beginning of Narrow Gauge in India and also firt effort by any princely state to develop

railways. At present, completing 150+ Years, Dabhoi-Miagam is one of the Oldest continuing passenger Narrow Gauge (2 feet 6 inches) line.

Narrow Gauge Revived, Steam Engine Rolls - 1873

8th April 1873 is red letter day in the annals of Indian Narrow Gauge history, when first time steam engine pulled a Narrow Gauge train from Miagam to Dabhoi. In the first three days itself, 57 persons boarded and 1217 Maunds traffic was booked. Next week traffic picked up to 244 passengers and freight traffic rs rose to 2913 Maunds. This ushered a new era and for this poundage of rail was changed from old 13 lbs to 30 lbs (old rail was not only too brittle for Steam engines but was also causing damage to wagons and coaches), formation was strengthened and even new stations were opened up. Line which was opened up in 1862, after some years had started giving trouble and slowly traffic stopped. It was decided to re-launch it and with the expenditure of Rs 4,18,622 it was restarted. Lower class fair was 4 pie per mile and upper class fair was 8 pie. Goods were categorized in five categories ranging from 1st and special class to 5th class and tariff ranging from 10 pie per mile to 40 pie per mile. Special concession was given to salt and grain where it was 8 pie per ton per mile. A passenger train could carry 212 passengers and a goods train could haul 57 tons with trailing load of 19 wagons and a brake van. Speed of section was 8 miles an hour. Out of 11 passenger coaches, there was one upper class carriage for 12 passengers, and rest were lower classes, each carrying 20 passengers. Working system was train staff system.

• Narrow Gauge Expands and reaches Baroda - 1880

1st July 1880, NG reached Goya Gate (now Pratap Nagar) and Baroda was connected with the Narrow Gauge network. After re-opening of Dabhoi-Miagam section, efforts were made to link other sections and Chandod, a holy place was linked on 15th April 1879, followed by Bahadarpur on 17th September 1879. After Goya Gate line moved towards Vishvamitri and it also came on Narrow Gauge map on 24th January 1881. Estimated cost of this expansion was Rs 7,57.407. Major cost was borne by augmentation of rolling stock which led to expenses of Rs 1,39,190. Narrow Gauge network has become almost 60 miles. With these expansions full potential of traffic was realized. During 1880, percentage of expenses to earning reached 49.44 and return on capital become 5.67%.

GBSR in the 1920s

Instrumental in building the first rail connection to Vadodara, the BB&CI was until 1921 responsible for the operation and upkeep of the narrow gauge network of the Gaekwars.

It was only under the stewardship of Maharaja Sayajirao Gaekwar, that the running of this enterprise was finally taken under the wing of the State in the form of the GBSR. Within six months of the take over, the losses incurred by the network turned into profits and plans were already underway for the construction of the State Railway Office (present DRM Building) and a Railway Store and Loco Shed. Residential quarters, recreational facilities and officers' bungalows were later added to the complex.

• GBSR takes Over - 1921

1st October 1921 marked a change and opened a new chapter in the history of Baroda State Railways, when Gaekwar Baroda State Railway (GBSR) started working Narrow Gauge system by itself. Baroda State owned, constructed and run railways since 1862 but operation and maintenance was in hands of other

companies, mostly BB&CI. In case of Narrow Gauge even rolling stocks were purchased and owned by Baroda state. BB&CI was charging based on actual expenditure and a fixed supervision charges for operation and maintenance (O&M). In case of MG and BG systems, it was based on their expenditure on main line and rolling stock of main line was used for sections being run in Baroda State

Preparation for taking over started in 1919 itself when foundation stone of Goya Gate workshop was laid down by Lord Chelmsford on 25th March 1919. A head quarter office was constructed, a new colony was built and loco and carriage shops were created. Initially only Narrow Gauge System was being operated by GBSR but slowly Meter Gauge section was also taken over. [More about GBSR - CLICK HERE]

• Reorganization - Western Railway & Baroda Division

1949 - Merger of GBSR with BB&CI

Post Independence, on Sept 4th, 1948, an interim Government under Prime Minister Dr. Jivraj Narayan Mehta was inaugurated in the Baroda State by the Maharaja at a special Durbar. Finally on May 1st, 1949, Baroda State, the third largest state of the British India formally merged with the Union of India. Dr. Jivraj Narayan Mehta later on became the first Chief Minister of Gujarat. GBSR also merged with BB&CI in 1949 with merger of Baroda State.

1951 - Beginning of Western Railway

On 5th November 1951, Westem Railway was inaugurated. It was created with merger of BB&CI with Saurashtra, Rajputana and Jaipur railways. Several railways of westem Gujarat, including the Bhavnagar, Kathiawar, Jamnagar, Dwarka, Gondal, and Morvi railways were merged into the Saurashtra Railway in 1948.

1956 - Opening of Vadodara division

With the introduction of Divisional system, the Baroda Division was inaugurated on 15th August 1956. Its office was located in the same building of headquarter of GBSR since 1st October 1921.

Estimate

Heritage Conservation of Garage of The Gaekwad Royal Train Carriages to house The Baroda Heritage Museum including exhibition

Breakup of Total Cost:

Conservation works 157.85 Lacs

Architectural Interventions (Civil Works) 127.82 Lacs

Coordination fee for Heritage Trust 10.00 Lacs

= 297.67Lacs

Cost of project:

3.0 Crores

(excluding taxes if any)

Breakup of Estimates of works

Estimate for restoration of old railway saloon for reuse as a City Museum

S.No	Description	Quantity	Unit	Rate	Amount
1.	Cleaning of structure	1	Lumpsum	5,00,000	5 Lacs
2.	Repair of old brick work using the same type of bricks	6000	Sq.Ft	200.00	12 Lacs
3.	Repair of Stone Work	250	Cft	6000	15 Lacs
4.	Repairs of the roof with wooden members and Mangalore tiles	11500	Sq.Ft	500	57.5 Lacs
5.	Sky light using 10mm malty layered polycarbonate sheets	1000	Sq.Ft	700	7 Lacs
6.	Window replacing with double glazing	1400	Sq.Ft	800	11.2 Lacs
7.	Insulation and acoustic on the wall and roof	1	Lump sum	10,00,000	10.0 Lacs
8.	Flooring of natural stones	8,500	Sq.Ft	150	12.75 Lacs
9.	Contingency		10% on 130.45		13.05 Lakhs
10.	Fees on Consultancy (excluding taxes and Travel)		Lump sum		20Lakhs
			Grand Total		₹ 163.50Lakhs

Estimate for the civil and interior work of the railway saloon shed for reuse as City Museum

S.No	Description	Quantity	Unit	Rate	Amount
1.	Civil work like, RCC foundations, PCC, RCC Beams etc.	1	Lumpsum	10,00,000	10.0 Lacs
2.	Fabrication made out of MS Sections with white epoxy coating	35	Tn	70,000.00	24.5 Lacs
3.	Interiors like, Partitions made out of Gip board, glass, Aerocorn panel, etc	1	Lumpsum		26.0 Lacs
4.	Internal painting	25000	Sq.Ft	20.00	5.0 Lacs
5.	Air conditioning with 40 tn capacity	40	Tn	45,000.00	18.0 Lacs
6.	Flooring of wooden planks	3,500	Sq.Ft	220.00	7.7 Lacs
7.	Lighting and Electricals	1	Lump sum		20.0 Lacs
8.	Plumbing	1	Lumpsum	5 Lacs	5.0 Lacs
9.	Fees for Architectural and other service Consultancy (excluding taxes and conservation consultancy)			Lump sum	18Lacs
			Grand Total		₹ 134.20Lacs