

**PROJECT COMPLETION REPORT**  
**MAI JAMAN**  
**MOSQUE**  
**December | 2024**



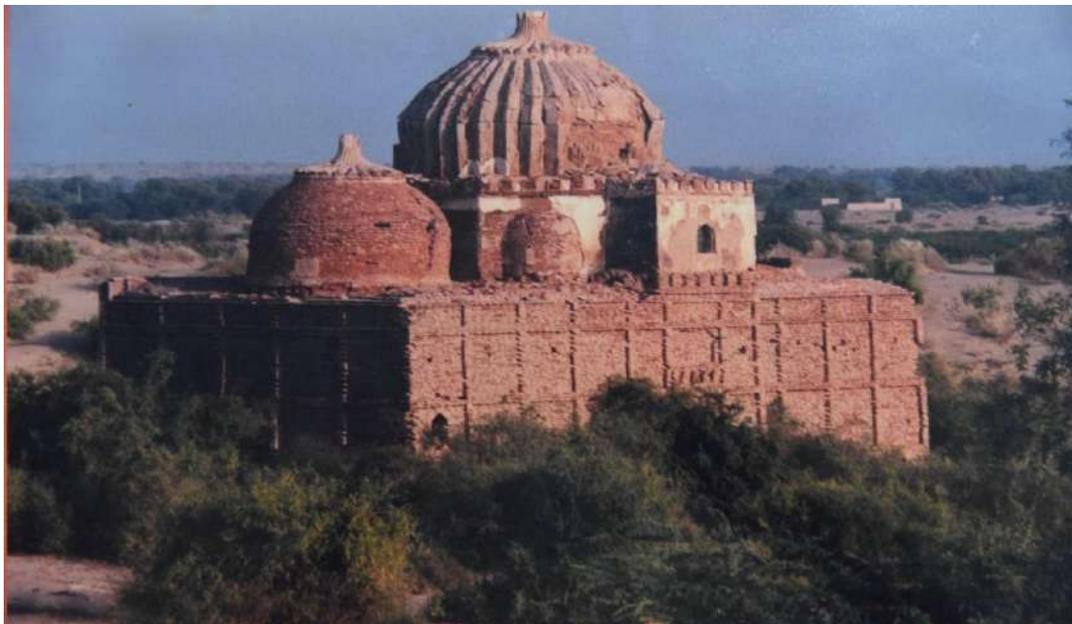
**Endowment Fund Trust**  
**for Preservation of the Heritage of Sindh**



## **INTRODUCTION**

There once was a time when the Makhi Lake at Sanghar was one of the most beautiful regions of Sindh. As a result of human interference with the area, natural plants and animals, which made up the diversified ecosystem, either relocated or became extinct over time. Inundated or otherwise impacted by the Chotiari reservoir, the majority of the land is now underwater. A number of well-known historical accounts, such as those found in the Hur Tehreek, centre around the lake.

Chotiari is a tiny settlement in the Sanghar district, next to Makhi Lake. Chotiari is home to several historical buildings and archaeological sites. Some of the many include the mosques constructed under the order of a lady of the Kalhora Dynasty, Mai Jaman. Mai Jaman belonged to the Junejo tribe. She got married to Mian Noor Mohammad Kalhoro and bore two sons. Mian Abdul Nabi and Mian Ghulam Nabi, both of whom ruled Sindh. Six intricately designed mosques were built by Mai Jaman in the region. These mosques are in a precarious condition as they were abandoned. Abandonment of a place of worship is a rare phenomenon especially in a province as God-fearing as Sindh. Yet, all the six extant mosques are known to share the same fate.



**The Photo of Mai Jaman Mosque was taken in 1996**

The previous photograph of the mosque in the last decade of the 20<sup>th</sup> Century reveals the craftsmanship of the dome and is a glance at what the structure looked like in its prime.

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Alas, through neglect and passing of time, the great domes of the mosque, alongside the plastering, collapsed completely leaving behind a shell of the structure.



**The photo of the Mosque was taken during preliminary survey-2021**



**The Mosque after jungle clearance in 2021**

The mosque was in a completely dilapidated state when the EFT survey team arrived to document the structure. Eventually, it was agreed that it is one of the few heritage structures extant in the region and conservation is imperative. As the mosque was to be rehabilitated and would be a living

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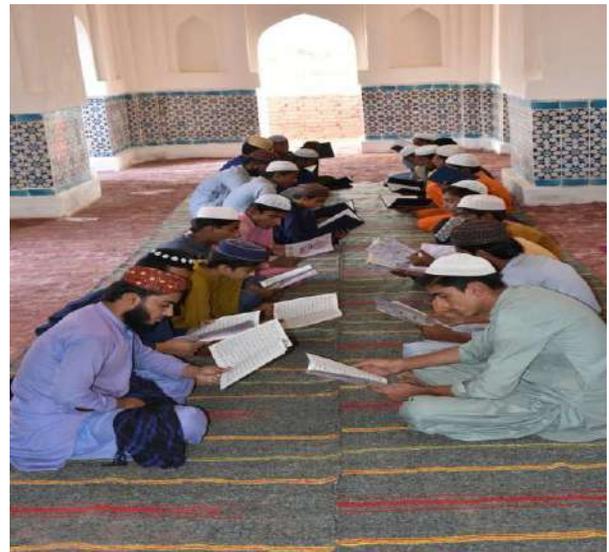
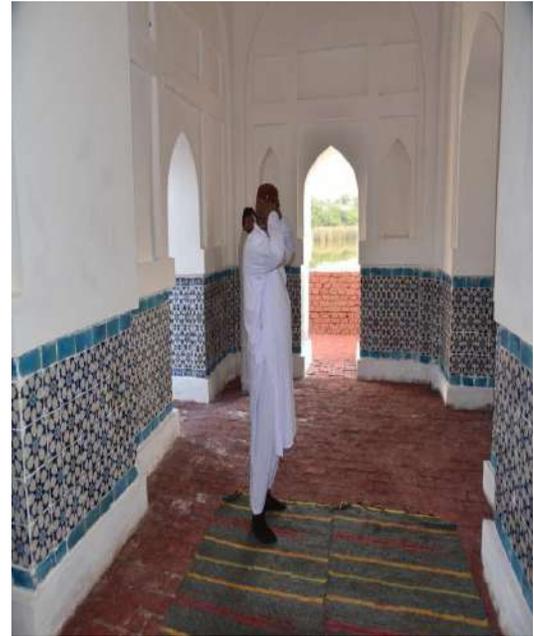


monument, special care had to be taken to maintain the structural integrity of the mosque. A load bearing structure built on sand, the conservation was meticulous and time-consuming. Through ardent efforts of the EFT, the mosque was eventually conserved keeping in mind the heritage material compatibility and construction techniques for authenticity. The first Adhaan was chanted after 250 years on 19<sup>th</sup> of November 2024, followed by prayers and Quran Khuwani.



**Drone image of mosque after conservation**

# COMPLETION REPORT: MAI JAMAN MOSQUE



**The Adhaan was chanted after 250 years on 19<sup>th</sup> of November 2024, followed by prayers and Quran Khuwani.**



## LOCATION

**Coordinates:** 26.045878, 69.182332

**Taluka:** Sanghar

**District:** Sanghar

The site is four Kilometers from the town of Chotiari.





## MATERIAL USED

The materials used in the construction include:

- Burnt bricks:  
Used as a masonry unit.
- Mud mortar:  
Used as a binding material.
- Chirolu:  
Used in arches, drum and domes.
- Lime plaster:  
Lime mixed with chirolu is used as a plaster.
- Kashi tile:  
Used as decorative tiles in the panels and façade.





## ARCHITECTURAL DESCRIPTION

- The mosque is a beautiful tri-domed rectangular structure.
- It has three chambers and a staircase to the roof.
- The bricks used are the Kalhora era 9.5”x7”x1.5” size.



- The fact that it was built on a dune means that the damage of water logging is largely averted.
- Its longer side runs parallel to the North and South, the entrance is towards the Western Side and the Mehrab faces the East; typical build of any mosque.
- A depression to the North-East of the hill stores rain water for the area.
- All three domes of the structure have collapsed and restoration would be problematic. Fortunately, eye-witness reports by travelers and historians as well as procured photographs would prove helpful in the process.
- Five archways allow entrance into the mosque; three on the western side and peculiarly one on the northern and southern side each.

## COMPLETION REPORT: MAI JAMAN MOSQUE



- Kashi work is evident throughout the mosque specially adorning the panels. The outer façade shows evidence of kashi work.
- The central dome is relatively larger and rests on an octagonal drum. The drums have niche openings to allow air and sunlight into the mosques. Old photos show the central dome to be a ribbed dome. The other two were hemispherical domes.
- The interior is adorned with niches and panels.
- The mosque is said to have a spacious courtyard once.





## Condition Report

- The mosque appears stable, structurally.
- It can be observed that the mosque has sustained weathering damage.
- All three domes have collapsed.

- The exterior side of the mosque shows the black staining of bricks; shear cracks due to tensile stress caused by settlement; detachment of spalled bricks at places and displacement.



- The interior sides show severe spalling; bulging; and displacement of the masonry work. The arches appear intact although keystone damage is observable and might need replacement. The majority of plaster has fallen off. The tile work is barely evident anymore.
- The floor appears to be uprooted. This might be due to the work of greedy desecraters. Many of the rubble appear to be missing from site including the bricks from the collapsed domes and kashi from the panels.
- Underpinning is advisable although the foundation still appears sturdy.
- The structure is surrounded by overgrowth which would need to be cleared as plant roots play a role in foundational failures. This will also allow more accurate measurement of the structure and improve accessibility.



## Pictorial condition report



All three domes have collapsed



View of the badly weathered octagonal drum with remains  
of the plaster dome ribs

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**View showing the absence of base bricks. (Arch abutments hanging)**



**Picture showing the badly spalled and bulging interior masonry work**

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**Eroded (or extracted) base bricks**



**View of the staircase and the eroded ground level bricks**

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View of the interior arch shows the way blocked by overgrowth and erosion of base bricks.

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View of exterior shows a variety of masonry defects like spalling, displacement and staining.



# CONSERVATION REPORT



## **JUNGLE/OVERGROWTH CLEARANCE**

The Mosque is located about 4 kilometers away from the town of Chotiari. It is constructed on top of sand dunes known as "Joghi Bhit." On its northern side lies a small village, while to the south, there is a beautiful natural lake. For centuries, this abandoned mosque remained hidden amidst bushes and dense jungle.

With the help of heavy machinery such as excavators and tractors, the thick jungle was cleared, and the sand dunes were leveled. Skilled masons were brought in from the Drigh Balla site in Johi, Dadu. Various construction materials were transported from different locations: bricks from Shahdadpur and Chirol, lime from Thatta, and sand from Bholahari.





## BRICKS

The bricks used in the old structure from the Kalhora period measured 9×6×1.5 inches. This size of brick was not available in the market. To produce these bricks, suitable mud and a kiln were selected in Shahdadpur, located about 40 kilometers away from the site. Approximately 35,000 bricks were required to restore the old structure.



**Kalhora period bricks size were not available in the market to produce these bricks the kiln was selected in Shahdadpur.**

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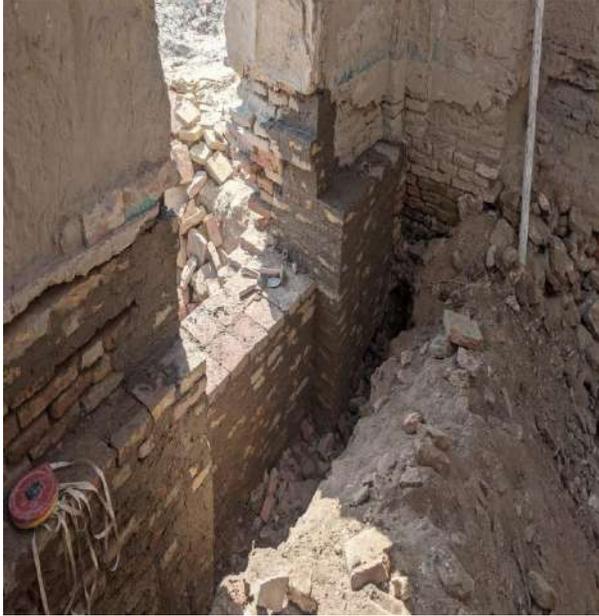


## UNDERPINNING & BRICK PATCH WORK

First, debris was removed from the site. The work began with underpinning and wall pinning, as the width of the walls varied at the entrances and columns. Bricks were missing up to a height of 4 feet in some areas. These missing sections were restored using new bricks of the same size.



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## PARAPET WALL

Since the construction of this mosque, it was left without an owner to look after and maintain the structure. For centuries, it remained abandoned, allowing the weather and people to damage it significantly, especially its decorative elements and bricks, which were often taken to be used in homes. As a result, the parapet wall had either collapsed or was removed entirely.

EFT redesigned the parapet wall using the original bricks, keeping its height at 1.5 feet. It was then covered with chiroly and lime. To protect it from rain and other weather effects, it was waterproofed with a mixture of lime cream and soapstone.



# COMPLETION REPORT: MAI JAMAN MOSQUE





## **EXTERIOR WALLS**

The exterior walls of the mosque are plastered with lime, with only a few sections on the front side decorated with Kashi tiles. The remaining three sides are adorned with recessed square and rectangular panels, also plastered with lime. The mosque has five arches providing entrances: three on the eastern side and one each on the northern and southern sides, which is a unique feature.

The EFT technical team restored various issues, including spalling, bulging, displacement of masonry, black staining, and plaster deterioration of exterior walls. The restoration process of walls involved applying a first coat of Chirolly, followed by two coats of lime covered with lime cream mixed with soapstone.



**Before**



**After**



**Before**



**After**

# COMPLETION REPORT: MAI JAMAN MOSQUE



**Before**



**After**



**Facade Before**



**Facade Before**

# COMPLETION REPORT: MAI JAMAN MOSQUE

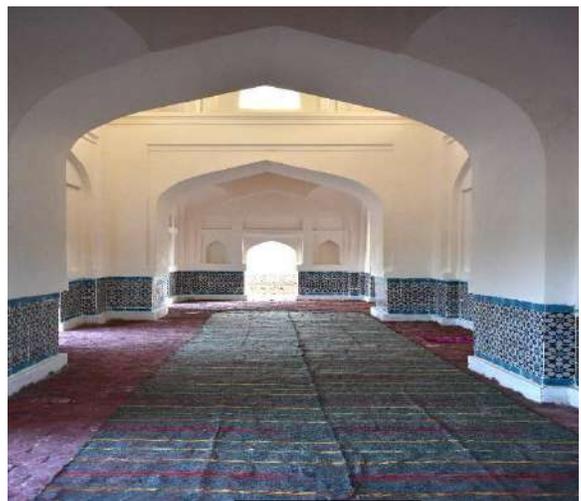


## INTERIOR WALLS, STAIRCASE AND MEHRAB

The interior walls show severe spalling, bulging, and displacement of the masonry work. The floor appears to have been uprooted, likely due to the actions of desecrators. Many pieces of rubble, including bricks from the collapsed domes, are missing from the site. Underpinning is advisable, although the foundation appears to be weak. Additionally, the structure is surrounded by overgrowth, which needs to be cleared, as plant roots contribute to foundational failures.



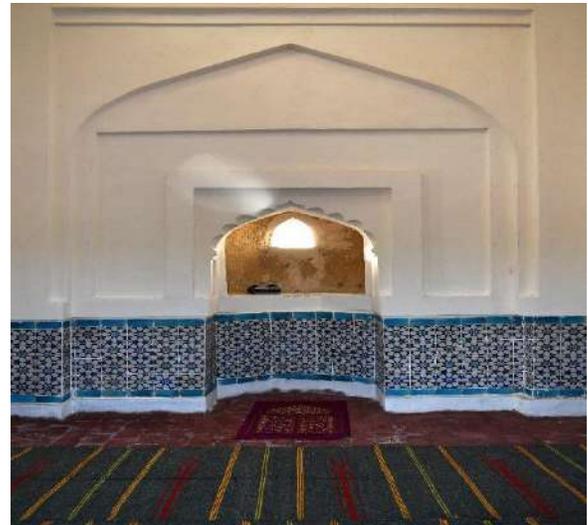
**Before**



**After**



**Before**



**After**

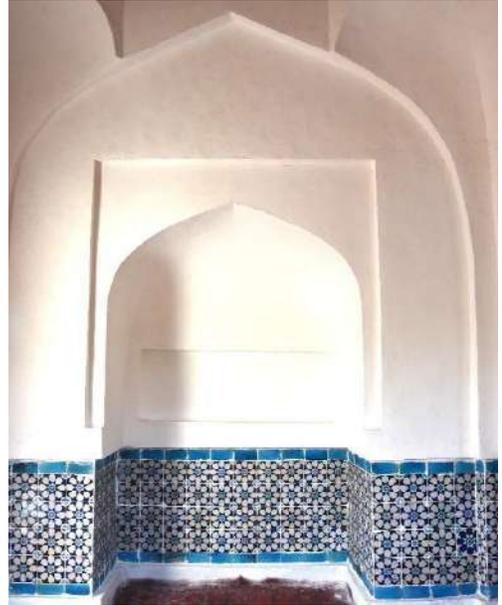
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View of interior Arch showing the exposed, weathered and missing bricks. New homogenous bricks were incorporated into the structure to ensure stability.



Before



After



Before



After

# COMPLETION REPORT: MAI JAMAN MOSQUE



Animals and treasure hunters had dug numerous tranches inside the structure. Additionally local people had taken bricks from the site for their own use.



Before



After



Before



After



## **DOMES**

The Mae Jaman Mosque is a rectangular structure featuring three domes, two of which have entirely collapsed. Only the octagonal drum of the massive central dome remains, but on the verge of collapse, with unstable and irregular squinches.

When restoring the mosque, the squinches were initially reinforced by incorporating steel bars. A lintel was subsequently installed on the octagonal drum of the central dome. After the drum was rebuilt, the center dome was redesigned utilizing computer assistance. Thus, the two smaller domes were designed. Thus the structure was reconstructed to the original form of the three collapsed domes, brick by brick.

Finally, the domes were plastered with one coat of chiroli and two coats of lime. To protect them from rain and moisture, lime was applied which was followed by soapstone for waterproofing. In the final stage, the lotuses were crafted, and kashi finials were erected atop the three domes.



**The three collapsed domes have been restored**



**Octagonal Drum Before**



**Octagonal Drum After**

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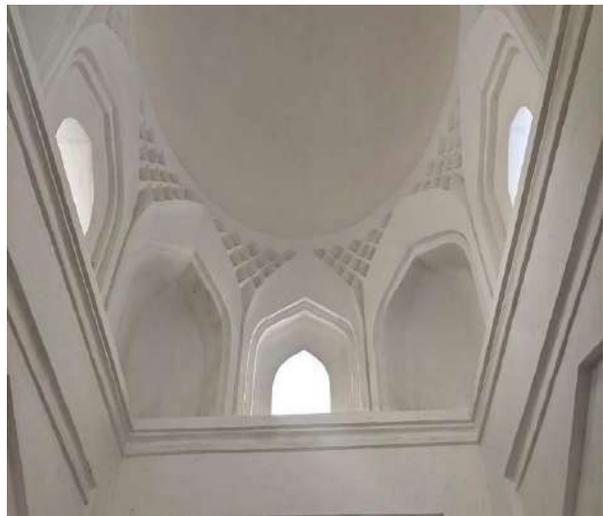
**Before**



**After**



**Before**



**After**

# COMPLETION REPORT: MAI JAMAN MOSQUE



## COATS/ PLASTER

The plastering of the outside walls utilized the same construction material and procedure as the original builders. Three layers were applied to the structure before the finishing was applied. Special care was taken regarding the ratio and the composition of the lime in adherence to evidence found on site, insuring longevity and sustainability of the work.



**During**



**During**



**After**



**After**

# COMPLETION REPORT: MAI JAMAN MOSQUE



## KASHI TILES

The mosque exhibits extensive Kashi work, which was a symbol of wealth and culture in the olden days of Sindh. This art form was once widespread in Sindh but is now nearly extinct. Today, Kashi craftsmen are still active in the small towns of Nasarpur and Halla.

The tiles for the Mae Jaman Mosque were crafted in Halla by renowned Kashigars. The façade, dado, parapet wall, and side strips were restored using Kashi tiles of the same size and design. The Kashi tiles in the interior of the mosque were also missing, with only a few traces and broken tiles faintly visible. Mr. Kazim Alvi, a Kashigar from Halla, repeatedly visited the site to recreate the tiles with the same pattern, size, and colors.



**Before**



**After**

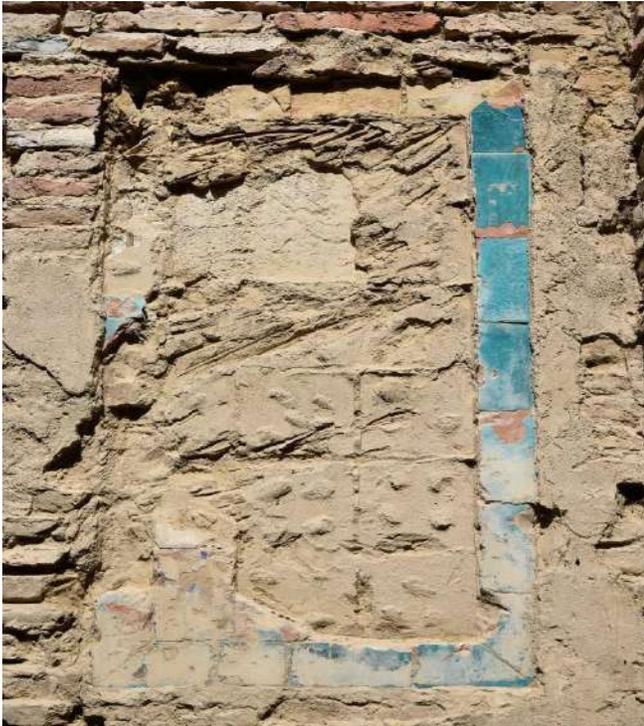


**Before**



**After**

**COMPLETION REPORT:  
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**Before**



**After**



**Before**



**After**

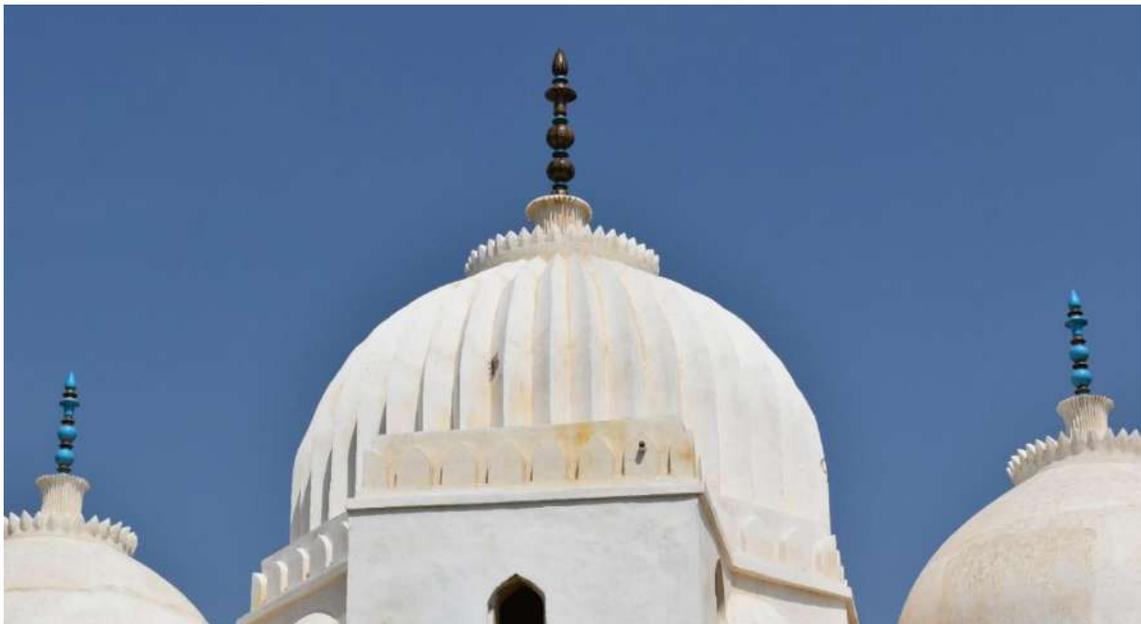
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**Before**



**After**



# COMPLETION REPORT: MAI JAMAN MOSQUE



**The Kashigars from hala repeatedly visited the site to restore the tiles and finials adhering to the original pattern, size and colors.**

# COMPLETION REPORT: MAI JAMAN MOSQUE



## FLOORING

There were no traces of flooring, either inside or outside the mosque, to indicate whether tiles or mosaic were originally used. Therefore, flooring bricks were used, both in the interior and exterior of the mosque.



**Before**



**After**

5



**During**



**During**

# COMPLETION REPORT: MAI JAMAN MOSQUE

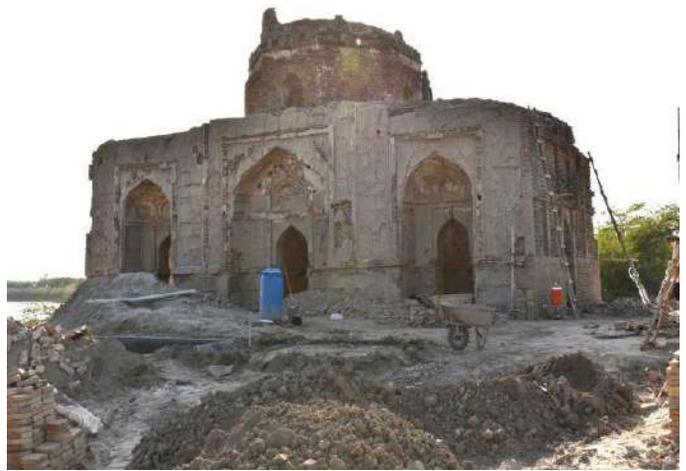


## BOUNDARY WALL

Subsequently, attempts were made to locate the old boundary wall of the Mae Jaman Mosque. To achieve this, several trenches were excavated to uncover the foundation of the Kalhora-period wall, an endeavor which proved fruitful. Using these footings, it was possible to reconstruct the brick wall around the mosque.



**Before**



**After**



**Before**



**After**

# COMPLETION REPORT: MAI JAMAN MOSQUE



**Before**



**After**



# COMPLETION REPORT: MAI JAMAN MOSQUE



## HANDING OVER

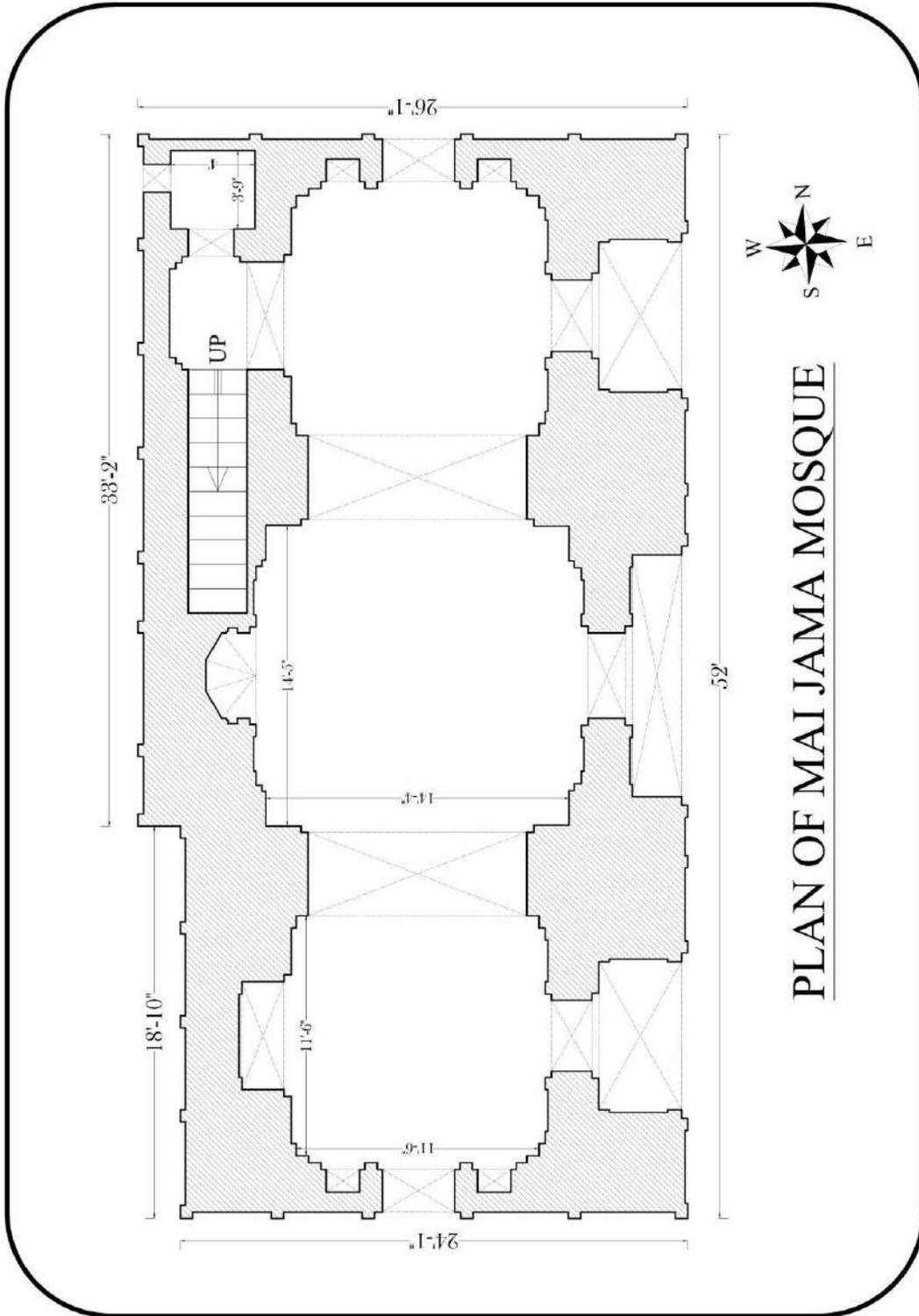
The completed Mosque was handed over to the local community so it could be an active place of worship for the community.



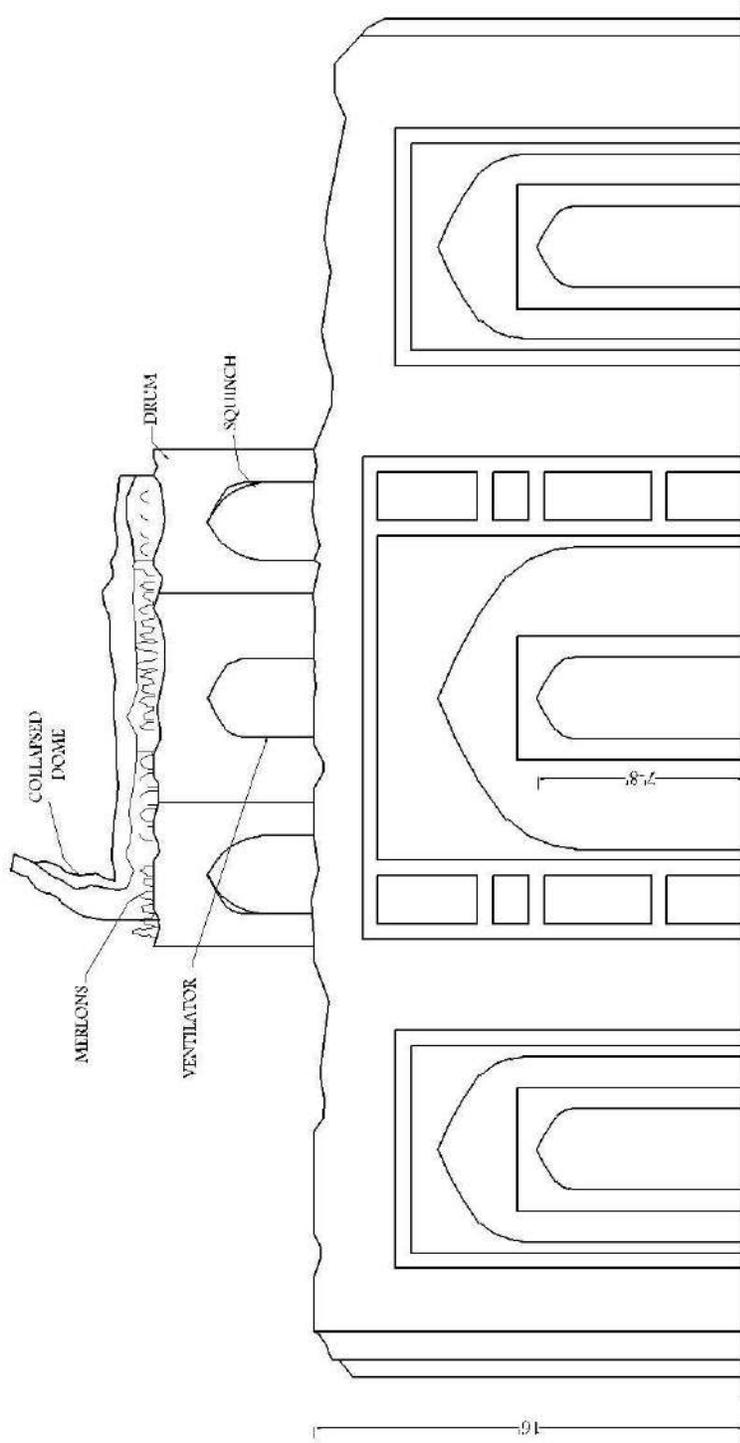
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## ARCHITECTURAL DRAWINGS

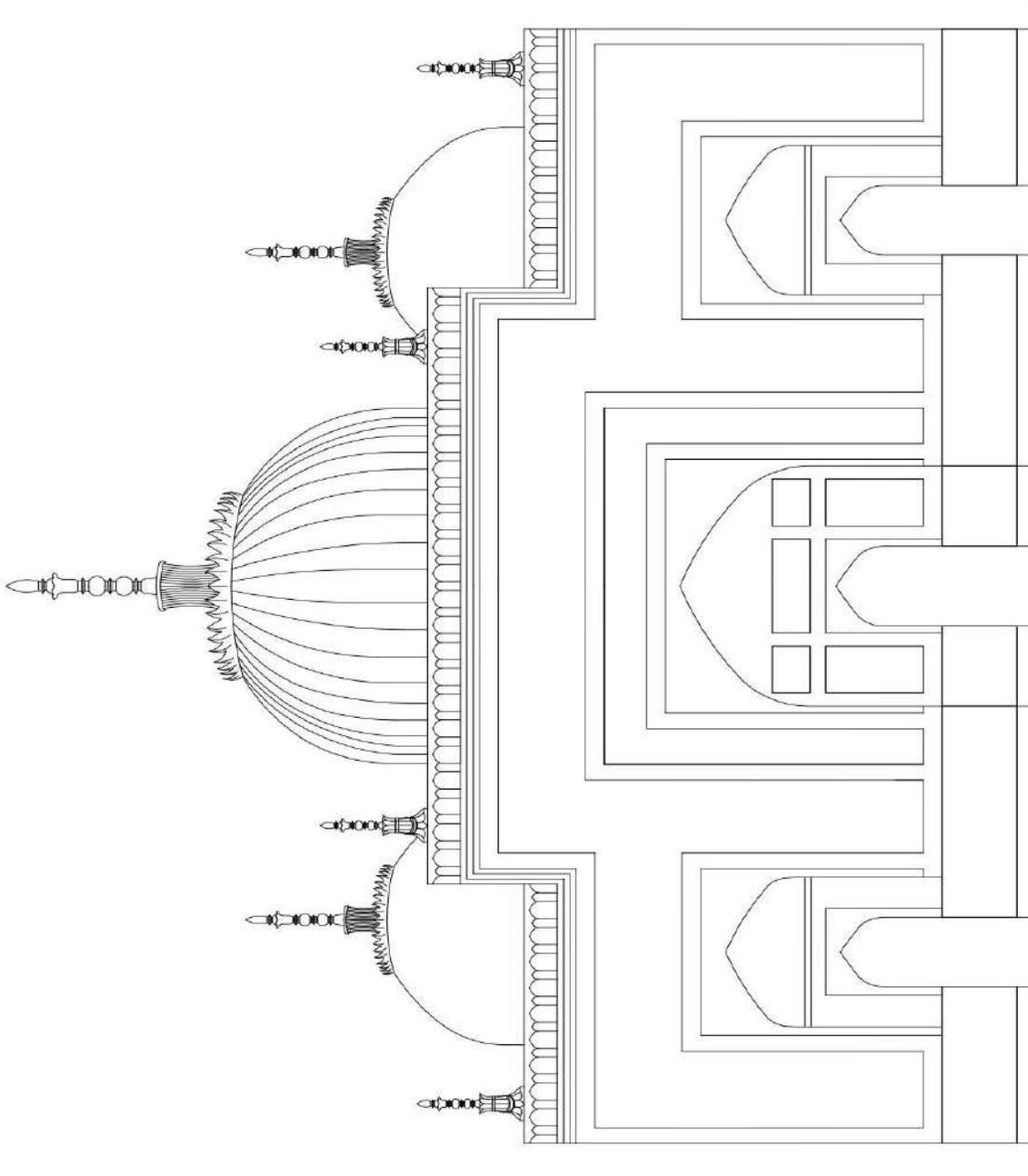


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FRONT ELEVATION OF MAI JAMA MOSQUE

COMPLETION REPORT:  
MAI JAMAN MOSQUE



ELEVATION OF MAI JAMAN MOSQUE



Dated: 19<sup>th</sup> November 2024

**TO WHOM IT MAY CONCERN**

I, Moula. Bano Malleh caretaker of the **Mai Jaman Mosque, Sanghar** is grateful to the “**Endowment Fund Trust for Preservation of the Heritage of Sindh (EFT)**” who have restored the “**Mosque**”.

I further commit to adhere to the Archaeological guidelines, as that there is no construction within approx. 200 feet of the Heritage site.

I further ensure that I will look after Mai Jaman Mosque Sanghar with complete dedication and turn it into a living monument.

• Moula Bano Malleh  
1487 GIBBS Ch. Berkef Du  
Dated 19-11-2024.

# COMPLETION REPORT: MAI JAMAN MOSQUE



**ENDOWMENT FUND TRUST  
FOR PRESERVATION OF THE  
HERITAGE OF SINDH  
REGIONAL OFFICE**

Ref: EFT/F-11/L-1871  
Date: 06-12-2024

## HANDINGOVER

This is to certify that the conservation and restoration work of **Mai Jaman Mosque, Sanghar**, completed by the Endowment Fund Trust on **19.11.2024**, has been formally handed over to **Mr. Moula Bux Mallah**, the Caretaker of the mosque, for its future care and maintenance.

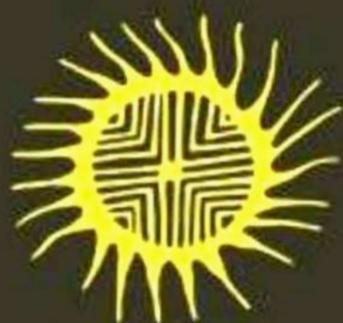
From the date of this handing over, the upkeep, cleanliness, and routine maintenance of the mosque shall remain the responsibility of the above-mentioned custodian.

We appreciate his cooperation and trust that he will continue to look after the site in an appropriate and responsible manner.

Regards,

  
06/12/2024

Ishtiaq Anshari  
Regional Coordinator,  
EFT, Jamshoro  
Tell: 022-2115514



**Endowment Fund Trust**  
**for Preservation of the Heritage of Sindh**